A Clinical Lecture

ON THE

VALUE OF SUTURES IN THE TREATMENT OF CUT THROAT AND SURGICAL WOUNDS OF THE AIR PASSAGE.

Delivered at the Middlesex Hospital on Nov. 29th 1892,

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GENTLEMEN,—I have recently described to you the varieties of wounds met with in cases of cut throat and also the sources of danger and the after complications in these cases. In my lecture yesterday I pointed out the effects of a foreign body in the air passages and the treatment you should employ in such accidents, and I told you that as there is danger so long as such a body remains in the air passages it is the surgeon's duty to remove or aid the expulsion of it by early tracheotomy, laryngotomy or thyrotomy.

Now, at first sight it may seem to you that there is no connexion between the treatment for cut throat and for foreign bodies in the windpipe; but there is this in common, that in each class of cases you may have to decide the question as to the employment of sutures. It is on this subject I wish to speak to you to-day, basing my remarks on cases which have been under my care in the hospital.

If you will refer to a passage in that very excellent and standard article on "Wounds of the Neck" by Mr. A. E. Durham in the third edition of the "System of Surgery" you will find, under the account there given of the treatment of cut throat, directions of which the following is an abstract. Mr. Durham says that as a general rule neither sutures nor adhesive plasters should be used, and for these reasons: 1. They are at best needless in most cases, because primary union can rarely be expected. 2. They are sources of danger in various ways: (*a*) If bleeding recurs blood may trickle into the air passage and cause suffocation; (*b*) at a later period purulent discharges may pass into the air passages or otherwise give rise to serious trouble; (*c*) inflammation and œdema of the neighbouring parts and of the mucus membrane of the larynx may ensue, or viscid mucus may collect, and if it cannot be expelled through the wound will obstruct the air passage and increase dyspnœa; (*d*) closure of the external wound by sutures is liable to be followed by emphysema. It is allowed that in the healthily granulating stage the surfaces may be approximated by sutures and plaster, though they may be torn out during coughing, and must be removed if discharges are confined, or pain is occasioned. Nelaton, we are told, recommended sutures at this stage in order to prevent the turning in of the edges, and the risk of a permanent fistula. It is also allowed that in certain exceptional cases sutures may be necessary from the first, as where "the cartilages of the larynx are cut in several places and the different pieces are much separated from each other"; and in cases "where complete division has been effected between the thyroid and cricoid cartilages, and these parts are separated from each other, one or two sutures may be used to approximate them; and if the trachea is completely divided across it may be desirable to have recourse to one or more sutures"; but, Mr. Durham adds, "in all such cases it is better to wait for a time after the divided portions of the air tube have been sutured in order to judge of the effect produced before attempting to close the external wound." No directions you see are given for the immediate and complete closure of the wound by a number of sutures introduced into each of the divided structures.

Mr. Durham in this description lucidly sets forth the treatment in common practice with surgeons, and recommended in standard works on surgery. Nor did it escape his researches into the literature of his subject that Albanese of Palermo, "whose experience in the treatment of wounds has been very extensive, would appear to advocate the immediate application of sutures in all cases of wounds of the trachea." In describing the removal of foreign bodies from the larynx by thyrotomy Mr. Durham says: "After the foreign body has been extracted, the edges of the incision through the thyroid cartilage should be brought together and secured by sutures not passed through the mucous membrane. It may be well to retain the laryngeal or tracheal cannula for two or three days, or until all indications of laryngeal mischief have passed away."

As many of you know, I have ventured to depart from the usually approved practice of leaving cut throat wounds to heal by granulation and cicatrisation, and have sought by the liberal employment of buried and superficial aseptic sutures to bring about immediate union. In doing this I use great care, after thoroughly cleansing all the parts about the wound, to unite accurately end to end the cut edges of each structure which has been divided; cartilage with cartilage, membrane with membrane, muscle with muscle, fascia with fascia and skin with skin; by this means, and at the same time by the insertion of a few pieces of drainage-tube at selected points of the wound, the various sources of danger which have been mentioned above are provided against and primary union has been readily attained.

I first used sutures on the air passage in January, 1888, in a case of papilloma of the larynx removed by extra-laryngeal excision. The crico-thyroid membrane, the cricoid cartilage and the membrane between the cricoid cartilage and first ring of the trachea were incised vertically and afterwards the wound was completely and accurately closed by five carbolised catgut sutures passed so as not to perforate the mucous membrane. Two were inserted in the crico-thyroid membrane, two in the cricoid cartilage, and one in the membrane below the cartilage; and two silk sutures held the skin together. Immediate union was obtained.

After vertical section of the cricoid cartilage it would seem that sutures prevent lateral gaping, otherwise caused by the inferior constrictor muscles. This was indicated by the sense of dragging and pulling experienced by the patient during swallowing, and referred by him to the cricoid cartilage. When publishing this case[1] I recommended the treatment by primary sutures in cases of cut throat with the view to obtain immediate union and thereby avoid the possible contraction of the cicatrix which follows healing by granulation. Immediate union is not followed by contraction, and if the edges of the divided air tube be accurately sutured emphysema will not occur and there will be no danger from the entrance of discharges from the surrounding tissues into the lungs. Allowing for the defective state of the health and the depressed or excited mental condition of most persons with cut throat, the wounds being of the incised character ought, if accurately approximated and aseptically maintained, to heal by immediate union.

At the time I wrote the only case of cut throat in which I had applied sutures neither the food passage nor the air tube had been opened. It was not long, however, before I had the opportunity of putting my recommendation into practice, and I have on three occasions since employed primary sutures where the air passage has been opened. I will now briefly relate these cases in the chronological order in which they occurred.

CASE 1.—On August 1st, 1888, a man aged forty-five was admitted into Broderip ward. He was a well-made man, with a very restless manner, an anxious expression, pallid mucous membranes and a cold clammy skin. He had been drinking freely for ten days and on two occasions had had delirium tremens. On the front of his neck were two clean cut wounds self-inflicted with a razor two hours before admission. The upper wound was situated just in front of the hyoid bone, and extended one inch and a half to the left and one inch to the right of the mesial line, dividing the soft structures down to the bone. The lower, almost horizontal, extended about two inches on each side of the middle line. The skin, fasciæ, muscles, thyro-hyoid membrane and epiglottis were completely divided, and when the head was slightly raised the rima glottidis and back of the pharynx were brought into view. The two wounds were separated by a narrow strip of skin about half an inch wide. Hæmorrhage had been arrested before admission. The tongue was pale, moist, furred and tremulous. Pulse 68, small and compressible. Respiration 20, regular and unattended by pain. Phonation was neither painful nor defective. Shortly after admission he was removed to the operating theatre, anæsthesia was induced, and a thorough examination of the wounds was made, in the course of which there was rather free hæmorrhage from unsecured branches of the superior thyroid artery. These were ligatured,

[1] Brit. Med. Jour., April 21st, 1888.

and after removing blood-clots and thoroughly cleansing the wounded parts the upper wound was closed with several fine silk sutures. The lower wound was then attended to, and first the cut edges of the epiglottis were accurately held together by four (non-chromicised) aseptic catgut sutures. These were inserted obliquely and so that the mucous membrane was not injured, and when tightened good apposition all along the cut edges was obtained. The edges of the divided thyro-hyoid membrane, then the divided sterno-hyoid and thyro-hyoid muscles were in turn sutured with catgut, and the skin wound was closed with fine silk sutures. A small drainage-tube was inserted at each extremity of the wound, and dry boracic dressing was applied. The head was bent forwards and fixed in the usual way, just as if the wound had not been closed by sutures. An enema of beef-tea and brandy with a little liquid extract of ergot was administered on his return to bed, but was not retained, and he was found to have diarrhœa. A few hours afterwards—viz., at 5 P.M.—he had not been sick, but had spat up a few small blood-clots; there was slight difficulty in breathing. As the diarrhœa was troublesome a starch and opium enema was administered. At 9 P.M. he was quite comfortable, there was scarcely any dyspnœa, and the diarrhœa had abated. On Aug. 2nd there was neither pain, cough nor dyspnœa, but the patient was very restless and had only slept one hour. The temperature and pulse were regular. Nothing had been given by the mouth, and the nutrient enemata had been only partially retained. In the afternoon of this day the wound was dressed; it was looking quite quiet; a little blood-stained serum had escaped. In the morning of Aug. 3rd everything was perfectly satisfactory. The drainage-tubes were discontinued. Some water was given him by the mouth, none of which escaped at the wound. At 9 P.M. on this, the second, day fifteen ounces of milk and two ounces of whisky were swallowed slowly, but without pain or difficulty, and three or four small pieces of ice were taken just afterwards. From this time he improved rapidly and continued to be fed by the mouth on milk-and-whisky, a pint of milk and two ounces of whisky night and morning. On Aug. 7th all the superficial sutures were removed. There were a few drops of laudable pus from the track of the right drainage-tube. The wound being quite healed on the 10th, he was allowed up on the following day. He walked into the garden for an hour. He expressed himself as quite well, without pain or tenderness or difficulty of breathing or swallowing or any defect of voice. On Aug. 14th a laryngoscopic examination showed the larynx congested, the epiglottis curved so that its external margins unduly approximated towards the glottis. The vocal cords were normal in appearance and action. He left the hospital at the end of the fortnight from the infliction of the wound.

CASE 2.—A man aged fifty-four cut his throat in three places with a large clasp knife about 8.30 A.M. on Dec. 12th, 1889. He was seen soon afterwards by the late Mr. Bellamy, and some carbolised lint and a bandage having been applied to the wounds he was brought to the Middlesex Hospital and admitted under my care. He was in a very restless and violent state and tried to tear off his bandages; he stared wildly around him, and his hands and legs had to be strapped down to keep him at all quiet. Every three or four minutes there were convulsive spasms of various muscles, the muscles of the face and arms being specially affected. At one time there was opisthotonos, but this was thought by the house surgeon to be caused by voluntary struggling. The patient was quite conscious. A large quantity of blood was said to have been lost. He had been an epileptic for six or seven years and latterly his mind had been giving way. His relatives had contemplated sending him to a lunatic asylum. Five years ago he contracted syphilis, through a chancre on his finger (he was a medical practitioner), when attending a midwifery case. He had been for some time somewhat intemperate. An hour or two after his admission he was taken to the operating theatre, anæsthetised, the wound cleared of clots, all bleeding points were torsioned or ligatured and all the divided parts brought together and maintained in accurate apposition by sutures;—buried catgut sutures being used for the laryngeal structures, muscles and fasciæ; and silk sutures for the skin;—three drainage-tubes were inserted, the wound was dressed with dry antiseptic dressing and the patient was returned to bed, where his head was fixed in the approved fashion. Restlessness and excitement returned after recovery from the anæsthetic and he expressed his determination not to get well. The next day the wound was doing quite satisfactorily, but his restlessness and excitement continued. He made frequent efforts to tear open the wound, and during the second night after the operation—about 1 A.M. on Dec. 14th—he suddenly raised himself and, violently bending his body forwards, tore open his wound and then sank back in bed exhausted and died in a few seconds. The post-mortem examination was made thirteen hours after death, and the following notes are extracted from Mr. Leopold Hudson's report:—A well-nourished, well-built man. (*a*) Deep incised wound three inches and a half in length notching the thyroid cartilage just below the pomum Adami. The greater part of this incision was on the left of the middle line. (*b*) A second incision was on the left of the first and above it, and it ran downwards and inwards towards the middle line, joining the first obliquely. (*c*) A third incision, three inches long, began at the middle line and ran horizontally outwards to the right on the level of the thyro-hyoid membrane. There was considerable effusion of blood into the posterior wall of the pharynx and a perforating wound of the pharynx just behind the left superior cornu of the thyroid cartilage. The tip of the thyroid cartilage itself had been shaved off. There was marked œdema of the left arytenoepiglottidean fold and to a less degree of the right also. There was a jagged wound in the larynx beginning above the left false cord posteriorly, and running upwards and forwards to terminate in the substance of the epiglottis. The epiglottis had been partly divided. There was extensive extravasation beneath the mucous membrane around this cut. The stitches which had been placed in the deeper parts could be seen; none of them had penetrated the mucous membrane. The upper lobe of the left lung was partially adherent. The lower lobe of each lung showed some small areas of inhaled blood, and there were some patches of lobular pneumonia in the lower and back part of each lobe. The upper lobes were emphysematous. The right side of the heart was distended with fluid blood. The left ventricle was very considerably hypertrophied. The aorta showed patches of atheroma. The liver contained a small branched calculus in the substance of its right lobe, but otherwise was normal. The kidneys had very adherent and thickened capsules and the cortex of each was indurated and in places atrophied. The stomach contained a small quantity of altered blood; its mucous membrane was somewhat injected.

CASE 3.—A man aged forty was admitted into Broderip ward on March 8th, 1890, having cut his throat, dividing muscles, fasciæ and thyro-hyoid membrane, but not the epiglottis. Bleeding points were ligatured and under chloroform the divided structures were brought together separately by buried catgut sutures; silk sutures being used for the skin. Three drainage-tubes were introduced. Boric lint and boric charpie covered with alembroth gauze were the dressings. The wound healed without an interruption and the man was discharged from the hospital on March 27th.

CASE 4.—A man aged forty-eight was admitted into Broderip ward at the end of October, 1891, suffering from a urethral stricture for which perineal section had to be performed. As he was approaching convalescence he became morose and depressed, dreading his discharge from the hospital and being under some delusions about the stoppage of his pension, and pauperism that was staring him in the face. His discharge from the hospital was postponed once or twice because of this, but it was not suspected that he meditated suicide. However, on Jan. 20th, 1892, at 5 A.M., the man dressed himself and went to the lavatory. The nurse, who was attending to a patient close by, saw him go in and shut the door, and shortly afterwards, hearing strange gurgling sounds and thinking he was vomiting, she went to the lavatory and there found him on his hands and knees bleeding profusely from a deep wound in the throat and a blood-stained razor lying on the floor beside him. She promptly placed a draw sheet round the wound, endeavoured to stanch the hæmorrhage by pressure and sent for the house surgeon. On his arrival digital compression and afterwards torsi-pressure forceps and ligatures arrested the bleeding. The wound extended from one sterno-mastoid to the other. Two gashes had been made, bisecting one another in the middle line just at the apex of the thyroid cartilage. The skin, fascia, platysma, thyro-hyoid and sterno-hyoid muscles on each side, the thyro-hyoid membrane and the epiglottis on the level of the upper border of the thyroid were all divided. On the right side the wound was more extensive than on the left and the anterior edge of the sterno-mastoid was cut, the carotid sheath was exposed and many small, but none of the main, arteries were divided. On the left side two or three small arteries were divided. Between 1 and 2 o'clock the patient was removed to the operating theatre,

anæsthetised, every bleeding point was sought for and secured by ligatures, and after thoroughly clearing the wound seven catgut sutures were required to unite the epiglottis and the thyro-hyoid membrane. Thirteen catgut sutures were inserted into the muscles and fasciæ; and the cut edges of the skin were joined by sixteen fine silk sutures. Three small drainage-tubes were introduced, one in the centre and one at either end of the superficial part of the wound. Dry iodoform dressing was applied and the patient's head was fixed in the usual way. Nothing was to be given by the mouth for twenty-four hours, but he was to be fed by nutrient enemata, consisting of beef-tea and half an ounce of brandy every four hours. During the evening and night the patient was sick twice and the vomit contained a little blood-stained mucus. On the 22nd and 23rd the temperature rose to 101°, but the wound was doing perfectly well. The drainage-tubes were removed and shortened on the 22nd, and altogether discontinued on the 26th. He was allowed to take fluid nourishment by the mouth on the 23rd. There was only slight difficulty in swallowing. He had previously had a good deal of cough and expectorated a quantity of greenish sputum. On the 24th he sweated a great deal, was in a highly nervous state, very morose and restless, and had a very wild appearance; but his pulse was fair, his temperature 98°, and the wound was doing thoroughly well, the edges having united by first intention except where the drainage-tubes were. He declared he could not swallow and efforts at swallowing seemed to cause some straining; but the dysphagia was largely feigned, though in part it was real and probably due to stiffness and soreness at the base of the epiglottis, when the tongue was moved in deglutition. Certainly it was not excited by convulsive coughing set up by the passage of the food over the epiglottis and upper aperture of the larynx as is so often the case when the wounded parts are left ununited by sutures. On Jan. 29th all the superficial sutures were removed. The scar was firm and narrow; dysphagia had ceased entirely. There was no expectoration. He got up to-day and every day from this time. On Feb. 5th he went into the garden and on the 15th he left the hospital. He might have left sooner, but was detained for some days longer than necessary because of his repugnance to leave. On Feb. 29th it was reported to some of the ward staff that he had endeavoured, but without success, to reopen his throat by dragging forcibly at the scar.

The quick recoveries in Cases 1, 3 and 4 speak for themselves. The patients may be said to have quite recovered within ten days of the infliction of the wounds. In Case 2 there is no reason to doubt that the same excellent result might have been attained had the patient only allowed himself a chance by keeping quiet and being amenable to treatment.

Besides the brief paragraph in Albanese's article on "Wounds produced by Weapons,"[1] where he makes allusion to his success in the treatment of wounds of the trachea by interrupted sutures and antiseptics, the following letter shows that the same line of treatment had suggested itself to Surgeon-Major J. S. Adye Curran, who wrote to me in 1888 as follows:—

"Lisconfield, Rathmines-road, Dublin, May 2nd, 1888.

"DEAR SIR,—With reference to the concluding paragraph of your very interesting paper which appeared in the *British Medical Journal* of April 21st, I have great pleasure in stating that I entirely agree with you in the conclusions you have arrived at as regards the best treatment in 'cut throat.' I have had some five or six cases under my care amongst the troops in India, all of whom, I am glad to say, eventually recovered, but the mode of treatment never satisfied me as being correct or surgical. My last case there was a bad one: the wound was inflicted by a razor and extended horizontally across the throat for about three inches and a half, completely cutting across the thyro-hyoid membrane and allowing the larynx and trachea by its own weight to fall down, leaving a gap of about one inch between the cut ends. The hæmorrhage was great, although none of the large vessels were cut. The epiglottis remained attached to the upper segment; all fluid taken by the mouth returned by the wound. He was fed by daily passing a stomach tube. I applied a gymnastic belt round his waist, and had his head fastened down to this by long tapes attached to a night-cap. I tried by every means in my power to keep the parts in apposition, but failed, and in desperation put in two silver wire sutures, one on either side through the ala of the thyroid and round the hyoid. One cut its way through the thyroid next day from the constant coughing, and I put strong silk ones instead, which acted better. I then brought the wound together except at the very centre, and things went on well for a few days when œdema of the glottis setting in I had to perform tracheotomy. The case ultimately made an excellent recovery, but the entire case so disgusted me that I resolved the next case I should have to treat of a similar nature I would perform tracheotomy on the spot and bring the edges of the wound together. Having returned soon afterwards from India I had not an opportunity of carrying out my wishes, and had forgotten all about the matter until seeing your paper.

"I am yours very sincerely,

"J. S. ADYE CURRAN, M.B., F.R.C.S.I.,

"Surgeon-Major, M.S."

This account by Surgeon-Major Curran gives an excellent picture of the miseries and delay which attend healing in cases not treated by accurate closure of the wound by primary buried sutures. It will be noticed that Dr. Curran's patient had cut into his air passage on the same level as each of my patients — namely, through the thyro-hyoid membrane—detaching part of the epiglottis.

The frequency of cases of cut throat in civil practice may be guessed at from the following particulars extracted from the records of the hospital for the purposes of this lecture by Mr. Leopold Hudson:—

Year.	Cases.	Sex.	Result.
1887	4	3 males and 1 female	All recovered
1888	4	All males	2 died
1889	5	All males	1 died
1890	1	A male	Recovered
1891	3	All males	1 died
1892	6	5 males and 1 female	All recovered

Two of the cases of 1888 were under my care; in one the air passage was not opened, the other is Case 1 related above; in both sutures were used and both recovered. The fatal case in 1889 is Case 2 related above. Of the 10 cases in 1890, 1891 and 1892, in 4 there were wounds of the air passage; one through the thyro-hyoid membrane dividing the epiglottis, one through the crico-thyroid membrane, and one through the trachea wounding the œsophagus. In a fourth (Case 3, *supra*) the thyro-hyoid membrane was cut without the epiglottis being divided. In one of these 4 cases there were two wounds, in the other 3 the wounds were single. Of the 6 cases in which the air passage was uninjured the wounds were single in 3 cases, double in 2, and triple in 1. In one of these 6 cases the left sterno-mastoid muscle was cut halfway through; the wounds in the other 5 cases were quite superficial. In all 6 cases sutures were used, and 3 of them suppurated.

On this last mentioned fact I wish to say a few words. One of the 3 cases which suppurated was under me, and it forcibly shows the advantage of the primary introduction of sutures at as early a stage as possible, and also the necessity of restraining the movements of the head and neck during treatment.

A man aged forty was admitted on Oct. 8th last with a cut nine inches long from a spot one inch below the left mastoid process to a corresponding point on the right side. The left sterno-mastoid was cut half through. No large vessel was divided. Three sutures only were inserted and these at long intervals apart. The wound was covered with a piece of lint and a thick layer of cotton wool retained by a bandage. No head and waist straps were applied. As the wound did not extend into the air tube, and as no important structure had been wounded, and as I was told sutures had been inserted, I did not look to the wound till the 10th, when I at once ordered several other sutures to be introduced. On the 12th delirium tremens was well established, the wound had suppurated and the stitches introduced on the 10th all gave way. The only sutures which held were the three inserted immediately after his admission into hospital. At each of these spots primary union took place, and did not afterwards break down in spite of the restlessness during delirium. I think it fair to conclude that had a number of sutures been introduced at once and the head fixed with two bands passing from the head to the chest or waist belt the whole wound would have healed securely by primary union. Be this as it may, however, I would impress upon you *the necessity of securely fixing the head and steadying the neck during the healing of the wounds after closure by sutures.*

The advantages to be obtained in cases of cut throat from the use of primary sutures in the manner I have recommended may be summed up as follows:—1. The cut edges of each structure being brought into exact apposition, and so retained by the sutures, union by first intention is secured. 2. This rapidity of union allows of rectal feeding being employed up to the time the patient can swallow naturally. 3. The distress caused by feeding three or four times a day through a tube passed into the pharynx or œsophagus is thereby avoided. 4. The prevention of painful or distressful attempts at swallowing, attended by the escape of the fluid at the wound and the excitement of troublesome spasmodic cough. 5. The pre-

[1] Albanese's statement is: "Les blessures même à la trachée, le plus souvent transversales sous la région hyoïdienne, provenant d'homicide ou de suicide, furent aussi toujours réunies par première intention par des points de suture détachée, et je confesse n'avoir jamais vu survenir la moindre suffocation." Extract from article in the Transactions of the International Medical Congress, 1881, vol. ii., p. 436, Blessures à l'Arme Blanche, by Dr. E. Albanese, Palermo.

vention of the great risk of contraction or stricture of the air passage or food passage so likely to follow when the wounds have been allowed to heal by granulation. 6. The prevention of a temporary, or permanent fistula opening into the air or food passage. 7. The avoidance *of an alleged danger* in cases where the epiglottis is cut through—viz., of suffocation from the detached portion of the epiglottis falling over the upper aperture of the larynx.

I have called this last an alleged danger because I am very sceptical about it being a real one, except in those very severe cases when the wound is above the hyoid bone and, extending right through the base of the tongue, shaves off the tip of the epiglottis. In such cases the tip of the cartilage, cut right adrift as it may be, is certainly capable of falling over the aperture of the larynx, but in all probability it will be in a moment blown away by a forced expiratory effort. Of course there is the possibility of a piece small enough being chopped off to fall into the cavity of the larynx, and if not coughed out at once causing suffocation. But there is no danger from this cause when the wound is on the level of the thyro-hyoid membrane. In these wounds if the epiglottis is cut through it is divided below some or all of its attachments to the glosso-epiglottidean folds; and, held by these, it is drawn forwards, but cannot fall backwards over the laryngeal aperture.

I show you here the tongue and larynx from two post-mortem room subjects, in which the throat was cut after death at this level, and in each case it was found that there was no tendency whatever for the upper part of the epiglottis to fall back. On the contrary, it fell forwards towards the base of the tongue and sank downwards slightly, so that the lower edge of the part still held by the glosso-epiglottidean folds was somewhat in front of the upper edge of the part attached to the thyroid cartilage. In this way a vertical aperture is left between the cut edges through which any liquid taken into the mouth mechanically runs away through the wound.

A Lecture
ON THE
MINOR AILMENTS OF THE RECTUM AND ANUS.

Delivered before the Preston Medico-Ethical Society,

BY J. A. RIGBY, M.D. LOND.

MR. CHAIRMAN AND GENTLEMEN,—The subject I am about to address you upon to-night—Minor Ailments of the Rectum and Anus—is one which is exceedingly difficult to deal with, not because of its obscurity but because of its simplicity. At the outset I mean to refer to the subject of hæmorrhoids, their causation and accompaniments. It is said that hæmorrhoids are frequently caused by obstruction of the circulation, either through heart, lungs or liver; thus the veins of the rectum, it is said, more frequently become hæmorrhoidal in cirrhosis and other diseases of the liver or in thoracic disease. I do not agree with this opinion. I do not think, judging from my own experience, that patients suffering from thoracic disease or cirrhosis, or any other disease of the liver, are one whit more subject to hæmorrhoids than anyone else; and if you think the matter out there is no reason why they should be. Take the case of heart disease, for instance, where there is hypertrophy. The increased muscular action is merely compensatory and is entirely occupied in overcoming the valvular resistance or incompetence, so that there is no actual increase of pressure in the blood stream. The circulation may be, and doubtless is, particularly in the later stages, more sluggish, but there never is, from beginning to the end, any increased intravenous pressure such as would cause hæmorrhoids. Again, in the case of cirrhosis of the liver we get a gradual invasion of and encroachment upon the real glandular tissue of the liver, with more or less complete obliteration of the bloodvessels. This at first sight would appear a most fruitful source of dilatation of the hæmorrhoidal veins and consequently of hæmorrhoids; but what says experience? I have attended numerous cases of cirrhosis of the liver, and as far as my memory serves me they were not distinguished by the presence of hæmorrhoids any more than other cases, if so much. The reason of this is obvious. The obliteration of the bloodvessels by the new fibrous growth proceeds very slowly. The portal vein is formed by the junction of the superior mesenteric and splenic veins; the superior mesenteric returns the blood from the small intestines, the cæcum and ascending and transverse portions of the colon; the splenic returns the blood from the substance of the spleen and receives the vasa brevia from the left extremity of the stomach, the left gastro-epiploic vein, pancreatic branches from the pancreas, the pancreatico-duodenal vein and the inferior mesenteric vein. Now I wish you to particularly notice what the inferior mesenteric vein does. It returns the blood from the rectum, sigmoid flexure and descending colon, but it does more—its hæmorrhoidal branches inosculate with those of the internal iliac and thus establish a communication between the portal and general venous system. Now let us see the effect of this most important inosculation on the subject of hæmorrhoids. In cirrhosis of the liver there is a gradual but certain and remorseless strangulation and obliteration of the portal vein and its tributaries, there is constantly increasing distension of the terminal venules of these tributaries with, ultimately, ascites due to the distended vessels relieving themselves one way or another (which it is not my present province to discuss) of their excess of fluid; but, in consequence of the inosculation of the hæmorrhoidal branches of the inferior mesenteric vein with those of the internal iliac, a safety valve action occurs, the pressure is relieved, the excess of blood is sent into the general circulation and we do not get hæmorrhoids in consequence of cirrhosis of the liver. I have taken some pains to go into this thoroughly, because these things are passed on from one text-book to another without in many cases being carefully tested clinically; and hence we are hampered at the outset of our career with wrong theories of causation and consequently our treatment of these maladies is inefficient and exasperating both to ourselves and to our patients. Again, this safety-valve action of the internal iliac on the inferior mesenteric veins explains clearly why constipation, the pressure of tumours and of the gravid uterus are not by any means the great factors in the causation of hæmorrhoids they are often said to be. Besides the constant presence of hæmorrhoids in persons who are otherwise quite healthy and subject to no other infirmities shows clearly to me that we must find another solution for these troubles.

With your permission I will now give you my theory as to their causation. In the first place, I find them quite as frequently—I believe more frequently—in persons whose bowels act regularly or are even somewhat relaxed than in those who suffer from constipation, which is explained by a careless and unnecessary prolongation of the act of defecation and the consequent incarceration of a portion of rectal mucous membrane within the sphincter ani. The subsequent discomfort, as the day passes on, eventually most likely wears off; the standing posture, movement and the tonicity of the lining of the bowel itself, ultimately remove the prolapsed bit of mucous lining beyond the reach of the sphincter and the patient again feels comfortable. The same process is subsequently repeated, however, till in course of time he finds that every morning for some hours after evacuation he is in a state of more or less pain, often amounting to absolute agony, for as you can readily see it is a mischief that tends to perpetuate itself and increase. The tender lining of the bowel has no time to recover itself before it is attacked again and the irritable sphincter lays hold of the slightly prolapsed lining at once, and by its constant action draws down and bruises or crushes it more and more, till, in cases that have gone on for years, the patient has often no respite, not even for a minute in the day, and presents himself to you a pitiable object with a ring of congested, inflamed or even sphacelated lining of rectum external to the sphincter ani. I could have described the process more in detail than I have done, but I think you will be able to grasp my contention now, which is, that hæmorrhoids are a purely local complaint in the great majority of instances, and that constitutional causes, and liver complaints especially, play a very small part indeed in their production. Another important factor in the production of hæmorrhoids is the customary position for defecation, which imparts too much force into the process.

Now I am going to take you a step further in the train of causation. We have found dilated hæmorrhoidal veins, caused by strangulation by means of the sphincter ani, a bruised, inflammatory and swollen condition of the mucous membrane from the same cause and a prolapse more or less complete of a ring of mucous membrane through the sphincter. This state of affairs is so intolerable that frequently the patient himself observes that it is only to be relieved by gently returning the prolapsed bowel at once through the sphincter after each stool. The day comes, however, when through hurry or carelessness or because the prolapse has been more swollen than usual the patient finds that on returning the gut he does not attain his usual ease, but is left with a weary burning pain which lasts for hours. What has happened? In returning the gut he has made a fissure of the anus, and though on examination you may perceive only what seems an insignificant crack, yet you have there the elements of the most lasting pain and distress, and what, if unrelieved, is sufficient to embitter life. I now come to the treatment. The hackneyed treatment adopted is to relieve the portal circulation by aperients, often mineral waters. The preparations of sulphur, senna and black pepper are greatly in favour and astringent ointments enjoy a great reputation, which I must here state is entirely undeserved, for I believe they do more harm than good; and if my view is correct the astringent acting on the inflamed mucous surface of the rectum would tend to harden it and so give the sphincter ani more power to lay hold of and drag down an increased tract of rectal lining membrane. I may state that I do not intend to discuss here the operative treatment of hæmorrhoids, but only the preventive or palliative treatment, and I will further anticipate by stating that if my directions are carefully followed out I believe the operations for hæmorrhoids, either crushing or cutting, will become very rare. I will assume my patient to have the condition described—namely, a ring of prolapsed rectum protruding through the anus and covered more or less completely with distended and inflamed veins. According to the severity of the case I should put the patient in bed and in extreme cases apply a few leeches—two or three if necessary. This, followed by a poultice and bathing with a soothing poppy-head lotion, invariably reduces the inflammation, and in the course of a day or two, with rest in bed, allows the hæmorrhoids and prolapse generally to be returned. Matters are now much simplified and the patient is in a fair way towards recovery. The next and most important point in treatment is what has to take place at the time of the next defecation. For this I am indebted to the suggestion of a patient. Whether it is generally known or not I cannot say, but I do know its importance has never, in my opinion, been sufficiently insisted upon. This is that the patient must lie on his back when his bowels act, and use a bed-pan or other such vessel. By doing this, from some mechanical cause that I will try to explain, the seat does not come down, there is no extrusion of mucous membrane or hæmorrhoids through the anus and the dire train of symptoms I have before described is thus avoided. The reason of this is more or less obvious. The increased and unnatural propulsive power obtained by using the tuberi ischii as fulcra fixed against the stool is lost and there is rather less than the natural propulsive power, together with the loss of the action of gravity. Be the cause, however, what it may, by thus defecating in the recumbent posture, there is neither prolapse of the hæmorrhoids nor of the seat, and if the operation be followed by bathing with a soft sponge and warm water and the application of the following ointment you will be surprised at the wonderful improvement that takes place in the patient. The ointment I have just alluded to consists of one part of the red oxide of mercury ointment to three parts of spermaceti ointment. It seems to both cool and soothe the part and if freely used after each motion and in bad cases about once a day besides will cure or greatly relieve hæmorrhoids and cure cases of fissure of the anus without having recourse to the knife. All this, you will say, seems vastly simple and agreeable and I have no doubt you are somewhat sceptical as to its being quite as beneficial as I seem to think. In answer to that all I can say is, try it and you will find it will do what I have said and more. Of course, in addition to the above local treatment a little tonic or tonic and aperient may prove useful, such as the sulphate of iron combined with a little sulphate of magnesia and peppermint water or some mineral aperient water. Moreover, it is just as well to avoid the use of acrid, rough and irritating papers for cleansing purposes.

ABSTRACT OF THE

Middlemore Lectures

ON THE

RETINAL AFFECTIONS OF BRIGHT'S DISEASE AND DIABETES,

Delivered at the Birmingham and Midland Counties Eye Hospital,

BY ROBERT SAUNDBY, M.D.ED., F.R.C.P.LOND.,

PROFESSOR OF MEDICINE, MASON COLLEGE; PHYSICIAN TO THE GENERAL HOSPITAL; CONSULTING PHYSICIAN TO THE EYE HOSPITAL.

Lecture I.—The following classification of the retinal affections of Bright's disease formed the basis for the descriptions given by the lecturer:—(1) Diffused opacity; (2) white patches—(*a*) rounded soft edged areas generally situated near the disc and (*b*) smaller, brighter, often radiated specks, generally near the yellow spot; (3) hæmorrhages; (4) optic papillitis; (5) diffuse retinitis; (6) secondary atrophic changes; (7) general retinal periarteritis. General retinal periarteritis was included in this classification because, although not solely, it is usually associated with Bright's disease and has therefore as much claim to be regarded as one of the retinal affections met with in Bright's disease as any of the forms more usually recognised. The pathological explanation of all these changes was sought in the dyscrasia which sets up, first, nutritive disturbances, and, secondarily, inflammatory and degenerative changes in the tissues. The minute histological details of each were fully described. The course of the inflammatory lesions was shown to be not necessarily hopeless of cure, though more or less permanent structural change might remain; even the degenerative spots sometimes disappear; cases illustrating these facts were quoted. The difficulty of assigning any absolute diagnostic value to these appearances was pointed out and illustrated by drawings and cases. On the other hand, the prognostic meaning of the degenerative white specks (*b*), of diffuse neuro-retinitis and of general periarteritis in otherwise well-assured cases of Bright's disease is well defined and of the most serious character. The lecture was illustrated by a number of diagrams and by microscopical preparations kindly lent by Mr. E. Treacher Collins, Mr. Lawford and Mr. Priestley Smith.

Lecture II.—After a brief historical introduction the lecturer described the retinal affections of diabetes in accordance with Hirschberg's recent classification: (1) Retinitis centralis punctata diabetica, in which there is a characteristic inflammation of the central portion of the retina, giving rise to the appearance of bright spots often coalescing and frequently accompanied by hæmorrhages; (2) retinitis hæmorrhagica diabetica, in which the essential process is hæmorrhage followed by inflammatory and degenerative changes; (3) mixed cases. The disease in all its forms occurs only in persons of middle or advanced life and in cases of diabetes of some standing. It is generally bilateral and causes disturbance of vision, the patients complaining of a mist before their eyes. In the first form the ophthalmoscope reveals groups of small, clear, bright specks situated in the structure of the retina, in and around the disc, occurring on the nasal as well as the temporal side, never radiated in arrangement, but often occupying large areas; never pigmented, but accompanied by fine punctiform hæmorrhages. It is never attended by optic papillitis or diffuse retinitis. Newly formed bloodvessels have been observed and there is a decided tendency to the occurrence of large hæmorrhages into the vitreous. This description was illustrated by a case and the fundus oculi shown by means of Mr. Priestley Smith's demonstrating ophthalmoscope. The pathology of the affection was held to be dependent on the diabetic dyscrasia which leads to nutritive changes in the walls of the vessels and to the effusion of albuminous material into and between the layers of the retina. In the second form the hæmorrhages are usually punctiform but may be striated and are situated all over the retina; their source is not the superficial retinal vessels and their rounded shape indicates that they are situated below the nerve fibre layer. There may be haziness of the retina, dependent on some degree of

œdema. The hæmorrhages are due to vascular degeneration caused doubtless by the dyscrasia, but the histological details have not been worked out. The course of both is progressive and no instance of recovery has been recorded, although temporary improvement in vision occasionally takes place. The first form is highly characteristic when well marked, but the diagnosis should always be confirmed by examining the urine. Little is known definitely as to the prognostic importance of either, but on general grounds it is probable that they indicate an advanced degree of those nutritive derangements which herald a fatal termination.

This lecture was illustrated by drawings and microscopical sections, the latter being kindly lent for the purpose by Dr. Stephen Mackenzie.

TWENTY-FIVE CASES OF SUPRA-VAGINAL AMPUTATION OF THE CERVIX UTERI FOR CARCINOMA.[1]

BY FREDERIC BOWREMAN JESSETT, F.R.C.S. ENG.,
SURGEON TO THE CANCER HOSPITAL, BROMPTON.

IN bringing these cases before the profession I wish it to be understood that I do so for the purpose of giving my support to the operation of supra-vaginal amputation of the neck of the uterus in those cases only in which the cancerous growth is limited to the external os or the cervical canal. If the vaginal wall or the body of the uterus are implicated, then in my opinion the operation is contra-indicated. The cases I am now reporting are those on which I have operated during the years 1889–90–91. With the exception of one or two, all the specimens were examined microscopically after removal and pronounced to be carcinoma. The one or two cases referred to were noted as doubtful cancer, but these had all the clinical aspects and characteristics of malignancy. The following are brief notes of the cases and, as will be seen, I have arranged them in chronological order.

In the year 1889 I operated on four cases:—

CASE 1.—Mrs. ——, aged sixty. Large family; duration of disease some months; os ulcerated and hardened; the cervix feels thickened and somewhat nodular; uterus freely movable; vagina free; supra-vaginal amputation performed on May 1st, 1889. The patient made an excellent recovery and had no recurrence until September, 1891, when the disease reappeared. She declined further operative interference.

CASE 2.—Mrs. ——, aged sixty-one. Three children; duration of disease some months; os ulcerated, extending into cervical canal; bleeds readily; offensive discharge; supra-vaginal amputation performed on July 16th, 1889. The patient made an excellent recovery, remaining free from disease until her death, which resulted two years later from bronchitis. The uterus post mortem, which I was enabled to get, was absolutely free from any recurrence of the disease.

CASE 3.—Mrs. ——, aged forty-two. Four children; duration of disease six months; os presented a ragged, ulcerated surface; cervix hard and thickened; uterus movable; vagina free; supra-vaginal amputation performed on Sept. 22nd, 1889. The patient made a good recovery, and is at present free from any recurrence.

CASE 4.—Mrs. ——, aged forty-one. Two children; duration of disease twelve months; posterior lip of os thickened and rough; deep ulceration, extending into cervix; uterus movable; vagina free; supra-vaginal amputation performed on Dec. 21st, 1889; recovery; no recurrence; suffers a good deal from pain at ordinary menstrual periods.

In the year 1890 I operated on eleven cases:—

CASE 5.—Mrs. ——, aged fifty-four. Father died of cancer of stomach. Two children; duration of disease five months; os and cervix indurated and somewhat ulcerated; uterus enlarged and only slightly movable; supra-vaginal amputation performed on Feb. 2nd, 1890; stump healed slowly; recovery, but the disease returned in three months.

CASE 6.—Mrs. ——, aged twenty-nine. Four children; duration of disease six months; the cervix is hard and thickened, the os ulcerated and cervix fissured; uterus mobile; vagina free; supra-vaginal operation performed on March 1st, 1890; recovery; still free from any recurrence.

CASE 7.—Mrs. ——, aged fifty-four. Sister died of cancer of the uterus. Two children; duration of disease eight months; cervix enlarged and indurated; vaginal surface free; offensive discharge; uterus movable; supra-vaginal amputation performed on March 25th, 1890; rather severe hæmorrhage; recovery; recurrence in a few months.

CASE 8.—Mrs. ——, aged forty-five. Aunt died of cancer. Duration of disease ten months; three children; cervix enlarged, indurated and ulcerated; several isolated nodules on cervix; uterus movable; supra-vaginal operation performed on April 20th, 1890; recovery; no recurrence.

CASE 9.—Mrs. ——, aged thirty-five. Duration of disease eight months; cauliflower growth from cervix; uterus movable; supra-vaginal operation performed on April 14th, 1890; died of pelvic cellulitis.

CASE 10.—Mrs. ——, aged forty-two. Six children; duration of disease ten months; irregular ulcerated growth from cervix; vagina free; uterus movable; supra-vaginal amputation performed on May 20th, 1890; recovery; disease recurred in a few months.

CASE 11.—Mrs. ——, aged sixty. Father died of cancer of liver. Two children; duration of disease four months; large cauliflower growth from cervix, bleeds freely when touched; uterus freely movable; supra-vaginal amputation performed on Aug. 9th; free hæmorrhage; recovery; well when last seen.

CASE 12.—Mrs. ——, aged thirty-nine. Four children; duration of disease twelve months; cervix ulcerated and ragged; uterus somewhat fixed; offensive blood-stained discharge; supra-vaginal operation performed on July 28th; disease extended into the body of the uterus; patient recovered slowly; the disease recurred immediately.

CASE 13.—Mrs. ——, aged forty-three. Eleven children; duration of disease nine months; irregular growth of considerable size springing from cervix; left side of os more especially affected; a good deal of hæmorrhage at times; supra-vaginal amputation performed on Aug. 12th, 1890; patient made good recovery; no recurrence subsequently.

CASE 14.—Mrs. ——, aged fifty-four. One child; duration of disease six months; extensive ulceration of os; cervix hard and indurated; uterus movable; supra-vaginal amputation performed on Nov. 7th, 1890; sharp hæmorrhage; forceps left on; patient made good recovery; no signs of recurrence subsequently.

CASE 15.—Mrs. ——, aged fifty-seven. One child; duration of disease twelve months; well defined rough, irregular growth from cervix; vagina free; supra-vaginal amputation performed on Dec. 5th, 1890; good recovery; no recurrence at present time.

In the year 1891 I operated on ten cases:—

CASE 16.—Mrs. ——, aged fifty-one. Duration of disease twelve months; hard irregular mass springing from the os-uterus, freely movable; supra-vaginal amputation performed on Jan. 30th, 1891; recovered; no recurrence.

CASE 17.—Mrs. ——, aged forty-five. Duration of disease eight months; ulcerating mass protruding from cervix; uterus freely movable; vagina not implicated; supra-vaginal amputation performed on Feb. 16th, 1891; recovery; no recurrence at present date.

CASE 18.—Mrs. ——, aged forty-seven. Three children; duration of disease six months; cervix infiltrated with growth; vagina free; uterus freely movable; supra-vaginal amputation performed on March 26th, 1891; good recovery; no recurrence.

CASE 19.—Mrs. ——, aged forty-five. Duration of disease six months; large cauliflower growth extending half way down vagina; vaginal walls implicated posteriorly; supra-vaginal amputation and removal of disease with scissors performed on May 17th, 1891; patient gradually sank and died June 3rd. Unsuitable case.

CASE 20.—Mrs. ——, aged forty-four. Married; three children; duration of disease seven months; os uteri deeply ulcerated and cervix considerably thickened and hard; supra-vaginal amputation performed on May 29th, 1891; good recovery; no recurrence subsequently.

CASE 21.—Mrs. ——, aged forty-five. No children; duration of disease twelve months; large ulcerated mass protruding from cervix, implicating vaginal wall; supra-vaginal operation performed on July 12th, 1892; good recovery; disease recurred in October.

CASE 22.—Mrs. ——, aged forty-five. Seven children (two miscarriages); duration of disease ten months; large hard ulcerated mass implicating both lips of the os; uterus freely

[1] Abstract of a paper read before the Gynæcological Society on Dec. 8th, 1892.

movable; vagina free; supra-vaginal amputation performed on Aug. 4th, 1891. Good recovery; no signs of recurrence subsequently.

CASE 23.—Mrs ——, aged fifty-one. Five children; duration of disease five months; deeply ulcerated condition of os cervix; infiltration hard; uterus movable; vagina free; supra-vaginal operation performed on Dec. 5th, 1891; good recovery; no recurrence subsequently.

CASE 24.—Mrs.——, aged forty. Eight children; duration of disease two years; small eroded surface at posterior lip of os, with great thickening and induration of cervix. This patient was treated for some time without effect. Supra-vaginal amputation performed on Dec. 18th, 1891; made a good recovery and free from recurrence at present.

CASE 25.—Mrs. ——, aged fifty-one. Six children; duration of disease three months; deeply ulcerated patch on posterior lip of os, the edges of which are roughened and everted; bleeds freely; supra-vaginal operation performed on Dec. 19th, 1891; good recovery; no recurrence at present.

From a study of these cases I think a valuable lesson may be learnt. In Cases 5, 7, 10 and 12 recurrence took place within a very short time of the operation. It may be taken therefore that they were unsuitable for this special form of operation. In Cases 5, 7, 10 and 21 no doubt total extirpation of the uterus per vaginam would have been more likely to have been of permanent benefit; while in Case 19 simple curetting and plugging with chloride of zinc wool might have been the better treatment.

Remarks.—I am quite in accord with Drs. John Williams, Schroeder and Hofmeier, whose statistics go conclusively to show that when carcinoma of the uterus is seen early and the disease is limited to the vaginal portion of the organ, supra-vaginal amputation is all that is necessary and it is useless to put the patient to the extra risk of total extirpation. It may be well here to define my meaning of supra-vaginal amputation as applied in this paper. It is not only the amputation through the cervix, by which operation the neck of the uterus is removed, but also the removing at the same time a large cone-shaped piece from the fundus of the uterus, which cone may if necessary be extended to the fundus. Gusserow gives the mortality after supra-vaginal amputation when performed with the knife at 9·09 per cent. and with the galvanic cautery at 7·75 per cent. Dr. Post, in the *American Journal of Obstetrics*, November, 1887, in 700 cases of vaginal hysterectomy he had collected, gives the mortality at 24 per cent. Since that time no doubt the methods adopted for this latter operation are much improved, but even Professor Martin (Berlin) gives his mortality at 16·6 per cent.; while, on the other hand, Leopold and Scenger give their mortality as low as 6·2 and 8·3 per cent. respectively. There can be no doubt, however, that the deaths after supra-vaginal amputation are considerably less than after total extirpation, and I think I have shown that the results obtained are such as to warrant us in advising the former operation in preference to vaginal hysterectomy. A few words as to the class of cases in which the supra-vaginal operation of the cervix is applicable. They may be summarised by saying that, in my opinion, if a case of carcinoma of the uterus, in which the disease is limited to the vaginal portion of the viscus and the fundus is free, the uterus being movable and the vaginal not implicated, such a case is one suitable for the high operation. By this operation I mean that a good-sized conical piece should be removed above the disease. In those cases in which the fundus is implicated, but the uterus is freely movable, I agree with Martin of Berlin and Skene of Brooklyn that nothing short of total extirpation of the entire organ is likely to be of any service. In those cases of the series which I have brought forward in which neither of these operations is indicated, as in Case 19, I think there is another course of treatment available which may be of great benefit in prolonging life and lessening pain; but of this I hope on a future occasion to give my experience. For the present I may say that this paper is based entirely on my own practice and upon those cases which have come under my notice, and I trust that should the profession think well of the treatment it will be given a fair and impartial trial.

Buckingham Palace Mansions, S.W.

SUPERANNUATION GRANT. — Dr. Edward M. Shirtliff of Kingston-on-Thames, lately medical officer of the Ham sanitary district of the Kingston Union, has been granted a superannuation allowance of £21 per annum.

A CASE OF CONVULSIONS PROVING RAPIDLY FATAL.

BY G. MATHESON CULLEN, M.D. EDIN.

THE following case of convulsions is of some interest on several accounts. In the first place, the patient was a typically healthy girl and had not been ailing in the least when she was suddenly struck down by this illness; secondly, the diagnosis was not by any means easy; and finally, the convulsions ended in death within five or six hours.

A female aged sixteen years and a half, tall for her age, strong and robust; employed in a circus as a supernumerary. She had scarlet fever when a child, but otherwise she never had a day's sickness. Mother and only sister died of tuberculous affections; no brothers; father alive and well. On the evening of Jan. 6th, 1891, she went to meet a male friend of hers, with whom she spent a couple of hours in a public house. She had several glasses of rum but was not intoxicated, because she left her friend and took her part in the circus as usual. She conducted herself there somewhat strangely, but as this was only regarded as some novel "fooling" on her part no particular attention was paid her. The performance over, she went straight home and saying that she felt tired she went to bed; this was about 10 P.M. So tired was she in fact that she did not undress, but lay down in her clothes. Her father left the house for his work a little before five the next morning and she rose to lock the door after him. He was surprised to see her with her clothes on and asked her the reason of it, but she only muttered a few words to the effect that he "need not mind" and closed the door quickly upon him. The father returned for his breakfast at 9 A.M., and his niece, who had slept with his daughter during the night, told him that that girl had not risen yet. After breakfast he went to the bedroom and tried to rouse the sleeper, but without success. About 10.30 A.M. she began to have "fits," and I was called in about 11.30 A.M. When I arrived she was quite comatose, insensible to everything, with complete anæsthesia of skin. Her cheeks were flushed; skin warm and moist; pulse 100, very feeble; temperature in right axilla 105·9°, in left 106·2°; respiration shallow, 60 per minute; pupils were widely dilated and insensible to light, right more dilated than left; conjunctival and superficial skin reflexes absent; knee-jerk absent, but ankle clonus marked. Convulsions were present, and were somewhat peculiar as regards the order of their occurrence. First of all the eyes twitched to the left, then the head jerked in the same direction, then the left arm, and finally the left leg became affected with spasms. The whole left side of body being thus affected the convulsions became more rapid, and at last became general, the right side being affected as well as the left, and then it required all the force of several bystanders to prevent her being jerked on to the floor. The convulsions then grew feebler and disappeared altogether on the left side, while they still persisted on the right, but gradually all movement ceased and the girl lay quite still with paralysis of all the extremities. The breathing became rapid and stertorous, with some frothing at the mouth, while the convulsions were general, but after the acme of the fit the respiration grew less and less forcible till all movement ceased, and then it almost stopped, the breathing being carried on by a few sighing respirations, three or four at a time, and separated by intervals of twenty or thirty seconds. The convulsions from first to last extended over about ten minutes, while the period of calm lasted from three to five minutes, after which the eyes would twitch to the left and the whole scene be acted over again. This regular alternation went on during the hour and a half I was able to watch the patient, and it continued I am told till 4 P.M., when, in the calm period following a fit, she quietly expired. There was nothing abnormal to be made out in any of the organs. The lung sounds were masked by mucous râles. No relaxation of any of the sphincters. About a teacupful of apparently normal urine was drawn off by catheter. On examination for albumen no trace was detected.

Diagnosis and necropsy.—My first idea on seeing the paralysis of the right side and convulsions on the left side was that the case was one of hæmorhrage into the left internal capsule with subsequent rupture into the lateral ventricles. The tuberculous history suggested a tuberculous tumour as the starting-point of the bleeding. The subsequent bilateral

nature of the convulsion, however, was against any lesion demanding an absolute destruction of brain tissue at the point considered. Poison had been suggested by the friends, who were naturally startled by the suddenness of the attack. I was unable, however, to reconcile the symptoms with those following any poison. Uræmia and pyæmia were equally untenable. Tuberculous meningitis was not very likely, because of the robustness of her body and also by reason of her previously good health, but the tuberculous family history and the difficulty of finding anything more likely made me incline towards it as the diagnosis. On the whole, however, I was very glad that the father was determined to sift the matter to the bottom and had called in the police to investigate the case. Accordingly, on Jan. 8th, 1891, Dr. Harvey Littlejohn made a post-mortem examination on the case, and at his invitation I was present at it. All the organs healthy; a few cysts in the kidneys, but capsule stripped off readily and there was no apparent disease. The examination of the brain showed nothing abnormal save a slight increase in the puncta hæmorrhagica of the white matter.

This, then, was a case of idiopathic convulsions, and because of their periodic character they might be classed under the heading of epilepsy, especially under that form of it which is known as "status epilepticus." On the other hand, the tonic convulsion which is so constant a feature in epilepsy was here conspicuously absent. Still I am sorry that the possibility of "status epilepticus" did not occur to me, for then I might have been led to try amyl nitrite, which Sir J. Crichton Browne has found so valuable in these cases. However, with the high temperature present in this case, I fear not even that remedy could have averted the death which appeared imminent at the first moment I saw the patient. Croton oil and bromides were alone tried.

Lauriston-place, Edinburgh.

A TYPICAL EXAMPLE OF THE EFFECTS OF MOUNTAIN AIR.

BY A. T. TUCKER WISE, M.D. BRUX.

AT the suggestion of Sir Andrew Clark I publish the following case as illustrating the rapid curative effects of mountain air in unilateral consolidation of the lung.

Dr. X——, aged thirty-one, was advised by Sir Andrew Clark to winter in the Alps and came under my observation at Davos towards the end of October, 1891. His illness commenced in the month of May with cough and profuse hæmoptysis after influenza. On his arrival here I found him suffering from a paroxysmal cough, chiefly troublesome in the morning and accompanied by muco-purulent expectoration containing tubercle bacilli in moderate numbers. The pulse was 116 at rest, running up to 140 on movement; temperature 97·2°; urine, sp. gr. 1015, phosphatic. Night sweats had ceased previous to arrival. The chest formation and family history were good. He had lost 20 lb. in weight, was anæmic and complained of weakness, shortness of breath and depression. On physical examination of the chest limited expansion was observed on the left side with marked dulness extending from the clavicle to the third intercostal space. Posteriorly there was dulness over the supra-spinous fossa and between the border of the scapula and spine on a level with the first and second dorsal vertebræ. From time to time a few clicking râles were detected with puerile breathing. Vocal fremitus was not marked on either side, the difference in vibration having little significance. Chest measurements gave 19 in., expanding to 19½ in., on the right side; 18 in., expanding to 18¼ in., on the affected side during deep inspirations. The other organs were normal. An irritable condition of the heart was treated with aconite and hydrocyanic acid; then a tonic system of treatment was adopted—iodide of arsenic with quinine &c. In the first week the pulse dropped from 116 and 140 to 84 at rest and 104 on movement. After the second week the dulness over the upper part of the left lung had completely disappeared and the patient was rapidly regaining lost ground. Progression towards recovery, with gradual expansion of the chest and gain in flesh and strength, was uninterrupted until February, when the following note was made: Insignificant difference in respiratory murmur; no dulness or râles of any kind; three or four bacilli found in expectoration on Jan. 26th; no expectoration since then; pulse 80 to 84.

Remarks.—This case illustrates the rapidity of recovery in lung lesions which is occasionally observed at these elevations. Sir Andrew Clark regarded the consolidation, not as miliary tubercle, but rather as being due to a caseous condition of disease. This was subsequently borne out by the march of the affection. No consolidation depending on a miliary deposit would have cleared up so readily. The patient has now (October, 1892) resumed his practice, is in robust health, weighs 13 st. 5 lb. (gained 28 lb. in Davos) and presents no sign of disease whatever with the exception of a faint expiratory harshness heard over the left apex, which would scarcely attract the attention of any auscultator unacquainted with the previous facts. The climatic advantages at high altitudes in relation to pulmonary disease are, to put it shortly, as follows: 1. Dryness of the air and its comparative freedom from micro-organisms and atmospheric dust, entailing a lessened liability to catarrh and irritation of the bronchial tract and drying the lungs. 2. Profusion of sunlight; with the low temperature the heat of the sun is easily borne and the violet rays of the spectrum act chemically on the blood, increasing the hæmoglobin. 3. Diminished barometric pressure; this facilitates chemical action in the blood and tissues, favours vaporisation of moist secretions in the lungs and aids pulmonary circulation and expansion. 4. The general stimulus of high levels, producing exhilaration and an increase of nutrition.

Davos Platz.

THE PHYSIOLOGICAL EFFECTS OF ALTERNATING CURRENTS.

BY W. S. HEDLEY, M.D. EDIN.

THERE seems no reason to doubt that, under certain conditions, the physiological effects of rapidly alternating currents vary with the frequency of the alternations. M. Tesla has proved this of currents with enormously high frequencies, and other observers have proved it of currents with comparatively high frequencies. It is easy to show by experiment that, under certain conditions and limits, the effects of an alternating current, so far as sensation and muscular contraction are concerned, decrease as the rapidity of alternation increases. Perhaps we may say that, under certain conditions, the severity of the physiological effects of an alternating current varies in an inverse ratio with the frequency of alternation. M. Tesla found that the current required to keep a tube of a certain length at a certain degree of brightness with the ordinary low frequencies was probably powerful enough to produce dangerous shock, but that if the number of alternations was raised to 20,000 per second the same degree of brightness was retained in the tube, but the current could be "scarcely felt." He explains that this is primarily due to the fact that a much smaller potential is required to produce the same light effect and also to higher efficiency in the light production. We need not follow the explanation as to light, and, so far as I know, the question of physiological effect is not further dwelt upon by M. Tesla. In discussing this experiment Professor Houston[1] considers that perhaps the principal cause why the high frequency of alternation is comparatively harmless is to be found in the fact that it is "in accordance with modern ideas to consider the electric energy as rained down on the surface of the conductor from the space outside it," and that if this view be correct what happens in the case of alternating currents is that, so to speak, "the bolt is no sooner hurled at the body than it is hurled away from it." In considering the possibility of getting something therapeutically practical and useful out of this and similar experiments, it is of importance in the first instance to make an attempt to discover what is the immediate electrical factor in producing these physiological effects. Is it mere rapidity of alternation *per se* or is it something that results from this rapidity of alternation? With a view to enlighten myself on these points I proceeded as follows: Taking a large induction coil and obtaining the interruptions by means of an electric motor in the circuit, having its fly wheel arranged with contact points touching a spring as it revolved and so designed that a musical sound would denote the number of alterna-

[1] A paper read before the Electrical Section of the Franklin Institute.

tions, I obtained results of which the following table gives an example:—

Rate of alternation.	Current in primary.	Electro-motive force in primary.	Total energy.	Effects (of secondary) on sensation and muscular contraction.
Per second.	Milliampères.	Volts.	(Watts).	
(*a*) 808	150	2·8	0·42	Well marked.
(*b*) 2428	120	,,	0·34	Slight.
(*c*) 4432	100	,,	0·28	Nil.

It thus appears that increase of rapidity of alternation brings down current strength.

Control Experiment 1.—A large coil was used which, when worked with its own spring and a current of 2 ampères at 8 volts, gave a spark of a quarter of an inch (5800 volts calculated by De la Rue and Müller's sparking tables). When the spring was screwed down and the motor[2] used to make contact and run at (my) medium speed—i.e., about 2428 alternations per second—the current in the primary fell to 0·75 ampère and the spark of the secondary to a little more than an eighth of an inch (say, 3000 volts), again showing the fall in current strength with a rise in frequency.

Control Experiment 2.—As a control experiment of both the above I went on to test the effect on sensation and muscular contraction of varying rates of alternation, but with the current in primary *kept constant*. Motor run as above, but coil worked by large Leclanché battery with a cell collector. Having obtained well-marked sensation effects and muscular contraction at a low speed, with a certain current strength, the speed was increased, with the effect that the current in primary was diminished. More cells were then thrown into circuit and the current brought up to its original value; the result was that the physiological effects became as marked as before. The inference therefore seemed tolerably clear that sensation and muscular contraction are not so much affected by rate of alternation as by the amount of current strength. Taken together, these experiments point as follows:—(1) That increased rapidity of alternation diminishes the current in primary, and therefore, of course, the induced current in secondary; (2) that with this increased rapidity and diminished current strength there is diminished physiological effect, but that if, with the increased frequency of alternation, current strength be kept up to its original point there is no such diminution apparent; (3) that therefore the current strength is one great immediate factor in producing these physiological effects. It seems that changing the frequency of alternation, by the motor method at least, is one way of influencing current strength.[3] How this may occur is a different question, but a highly interesting one, both from a medical and from an electrical point of view.

Norfolk-square, Brighton.

CASE OF DRAINAGE OF THE BLADDER THROUGH THE PERINEUM, WITH COMPLICATION.

BY ANDREW KEY, M.D. EDIN. &c.

THERE are some points of very great interest in connexion with this case which I think make it worth publishing. I have condensed my report of it as much as possible and do not enter into minute details. About nine years ago a gentleman, then aged fifty-four, consulted me. He had for a good many years suffered from an irritable condition of his bladder. On examination this was found to be due to enlargement of the prostate, producing the usual symptoms—increased frequency of micturition, some difficulty in the act, with much more than the usual pain; there was no stone in the bladder and the urine was in all respects healthy. These symptoms gradually increased in severity until, during the last three months of 1889, his life became miserable. His business engagements were very numerous, necessitating his presence frequently in Edinburgh, Dundee &c.; but his bladder symptoms had become so much intensified that he was almost unable to leave home. At this time, three months before he underwent the operation, he began to pass more urine than the normal quantity and on examination this was found to be of low specific gravity. In addition to an enlarged prostate he was found to have further trouble from diabetes insipidus. He was passing from 90 oz. to 100 oz. of urine in the twenty-four hours, of a density of 1006. As usual in such cases, he suffered greatly from thirst. No treatment had any effect upon this state of matters. During the last month of 1889 his sufferings were very great—he had to micturate every half hour, with great difficulty and increased pain. I had advised him to pass a soft catheter night and morning, or at least every night, as it was very evident that he never emptied his bladder. He could manage this well enough, but the urethra was so irritable that he had to abandon the attempt. The prostate was now so enormously enlarged that mere palliative treatment was evidently useless. The only mode of relief seemed to be by establishing an outlet for the urine through the perineum. He consented to this and the operation was performed by Professor Annandale of Edinburgh on Jan. 11th, 1890. Chloroform having been administered by me, the ordinary lithotomy staff was introduced and the bladder opened into in the middle line of the perineum. This staff was then withdrawn, a straight grooved one was passed through this opening in the perineum into the bladder and by means of it the opening was enlarged. Although he had micturated immediately before the operation, quite a pint of urine escaped into a basin. On passing the finger into the bladder the prostate was found to be enormously enlarged, Professor Annandale remarking that it was the largest, or one of the largest, he had ever seen. The operation was easily and quickly done and without a hitch. It was now clearly seen that a deep pouch had been formed behind the enlarged prostate which no catheter could have emptied and which at all times contained about a pint of urine, accounting for the frequent desire to micturate and the unsatisfactory result thereof. A strong stiff gutta-percha tube, smoothly rounded at the internal end and perforated, was tied into the bladder, which was washed out twice a day with a warm solution of boracic acid. As the patient resided twelve miles from Montrose, my son, then assisting me, remained with him for the first four days and nights; all had gone well and he was enjoying freedom from pain and quiet rest. But exactly a week after the operation—at 4 A.M. on the morning of the 18th—a messenger arrived at my house stating that Mr. S—— had been wakened suddenly with most acute pain in his left leg and that it had become rapidly greatly swollen. I went at once and diagnosed embolic clot in the femoral artery. I found the leg already double the girth of the other and the suffering intense. I administered a large dose of morphia subcutaneously and put up the leg in cotton-wool with a flannel bandage. Sleep soon followed and by morning the pain was much relieved. It was now evident that the case would be a tedious one, requiring much care. A thoroughly qualified nurse was got and the patient placed on a large water pillow. The embolic clot was a very serious complication, possibly due to the vitiated condition of the blood of one suffering from polyuria. But the case became more grave when exactly a week after, on the 25th, the right leg went in the same way as the left had done, the treatment being of necessity the same. Dr. Johnston of Kair repeatedly saw the patient with me and the prognosis was a very grave one. Phlebitis did supervene, however, all over the superficial veins of the legs, thighs and lower abdominal region. The patient was now very ill and utterly unable to help himself in any way. Fortunately the temperature did not rise and the constitutional symptoms were not so severe as might have been expected. He had excessive thirst, due to the polyuria, which still persisted. He could take plenty of food and a sufficient amount of stimulants—claret, occasionally a little champagne, but chiefly whisky and potash water. The legs were carefully looked after, well wrapped in cotton wool and no symptom of gangrene ever showed itself. Another week having passed without any further complication I was beginning to hope that my patient, who had been an exceedingly temperate, healthy man with a splendid constitution, would pull through,

[2] Driven with a current of 1·2 ampères from a bichromate battery.

[3] It is evident, therefore, that in all such experiments attention ought to be paid to the possible reduction of the initial electrical energy by reason of increased frequency. It is possible, although so far as I know nowhere stated in the published records of other experiments, that instruments were used which enabled these high frequencies to be obtained without diminution of current strength.

when he was seized on the morning of Feb. 1st with a most intense rigor, followed by the usual very hot stage and excessively profuse perspiration. For the first week after this rigor he had two rigors quite as severe every twenty-four hours, but without any marked periodicity, and was then left so exceedingly weak and ill that recovery appeared utterly hopeless. Dr. Johnston consulted with me repeatedly and at the end of this week of misery we concluded that he must certainly die. When the first rigor seized him he was put upon large doses of quinine and his allowance of stimulants was increased. Fortunately he could still take a fair amount of nourishment. His stomach retained everything, and this gave us a little hope. Another point in his favour was that even during the highest state of fever the temperature did not go much beyond 103°, falling to almost normal after the sweating stage. At the end of a week the rigors diminished in frequency to one a day, then one in two days, and before they finally left, which they did at the end of three weeks, one every third day, also gradually lessening in intensity. His weakness was now extreme. During all this time the wound in the perineum was perfectly healthy; no abscess, either external or internal, was formed. It was three or four months before any diminution of the circumference of the legs was apparent. All this time the urine had been daily carefully measured and the density taken. During the rigors, and when the profuse perspiration existed, the quantity had diminished. It certainly increased again, but never was so much as 90 oz. or 100 oz. in the twenty-four hours, and the density began to rise. In short, the blood got rid of the poison and the urine gradually became normal in quantity and quality. It was so at the end of three months after the operation and has remained so until now. I do not think the operation had anything whatever to do with the prolonged and varied illness; the blame must be attached to the state of the system, whatever that might be, caused by the polyuria. After the rigors had quite passed away, a long flexible indiarubber tube, with a stopcock at the end of it, was attached to the stiff tube in the bladder, and as his urine could be retained for about four hours the stopcock was then turned and the bladder emptied. The stiff tube had so completely accommodated itself to the perineal opening that there was little or no leakage. This tube was easily removed and a fresh one put in about every ten days.

At the end of seven months after the operation the patient was able to be out of bed and lie on a couch, and was soon afterwards assisted daily into another room. His health was now perfectly restored and he gradually recovered the use of his legs. In the month of December, nearly twelve months after the operation, he was able to go to Edinburgh and attend to business, doing so ever since, with frequent journeys elsewhere. The only pain or inconvenience he suffers from, and which he has always had since the operation, is a spasmodic contraction of the bladder, more or less daily, with the passage of a little urine through the urethra.

There are one or two points in connexion with this case which I should like to bring prominently forward. For many years before suffering from his bladder trouble the patient conducted a very large business. He had often very little opportunity for micturating and gradually accustomed himself to do without emptying his bladder for ten or twelve hours. I think one of the functions of the prostate gland is to assist the vesical sphincter. The prostate began to enlarge at an unusually early age, when the patient was not much over forty. Professor Annandale was astonished at its size. Then the irritation of the enlarged prostate or that of the urine, constantly retained in the bladder, had in some way produced the polyuria, which disappeared with the trouble caused by the enlarged prostate. Again the polyuria was disposed of in the same way as any other form of blood poisoning, but without any tangible manifestation, by severe rigors and intense diaphoresis.

High-street, Montrose.

ILKESTON COTTAGE HOSPITAL.—At the annual meeting of the friends of this institution, held a few days ago, the chairman was able to give a very satisfactory account of the success which has attended the work accomplished during the past year. Its finances also bear a similarly favourable aspect. One pleasing feature in the career of the hospital has been the practical appreciation shown by the working classes in the progress of the charity. Reference was also made to the proposal to build a new hospital, for which funds are already to some extent available.

AN OBSCURE CASE OF CANCER OF THE PYLORUS UNDETECTED DURING LIFE.

BY J. BALMAIN MACLEOD, M.D. ABERD.,
SENIOR VISITING PHYSICIAN, DUNDEE ROYAL INFIRMARY.

MISS C——, aged fifty years, consulted me for the first time on April 4th, 1890, for indigestion. She stated that she had always enjoyed good health till towards the end of 1889, when she had a sharp attack of influenza, from which she made a very slow recovery, and then, for the first time, symptoms of indigestion set in. The patient was a thin, wiry, pale-complexioned person. She complained of pain over the region of the stomach about an hour after taking food, which passed off in about half an hour, leaving her entirely free from pain till the next meal. Tongue very much furred; bowels constipated; appetite poor; stomach and bowels distended with flatulence. Nothing abnormal could be detected on examining the stomach. She had had no vomiting, but complained of acidity. I put her on a course of bismuth, rhubarb and soda, and carefully dieted her. On this treatment she seemed to improve, and left Dundee on May 6th for a change of air. On June 18th she again reported herself; she appeared to have improved by the change, but still suffered more or less from a fixed pain in the stomach; referred to a spot towards the left of the epigastric region. After seeing her for a few days she went to the Highlands for a further change, where she remained for about six weeks. Towards the middle of September, however, the pain appeared to increase, and was more constant than before, and now was not influenced by food; the pain was of a dull aching character, referred to a spot in the left epigastric region. She also complained very much of flatulence, with fetid eructations. Various remedies were tried, peptonised foods prescribed, but the pain persisted. Bismuth and morphia in powder were ordered, which had a decided effect in dulling the pain. About the middle of December Professor Grainger Stewart of Edinburgh saw her in consultation, and after a careful examination could detect no organic lesion, although by this time she had emaciated very much and had a cachectic appearance. He gave as his opinion that the dyspepsia was of a neurotic nature, and advised very much the same treatment to be continued. For a few weeks she appeared to rally and kept comparatively free of pain while taking the bismuth and morphia. Her appetite was wonderfully good and the food well digested, but she steadily emaciated from week to week and died on May 19th without any pain or suffering during the last fortnight of her life, and was calm and collected to the end.

On May 20th Dr. Stalker, for some time pathologist to the Dundee Royal Infirmary and my junior colleague there, kindly conducted the post-mortem examination along with me, and we found as follows: The body was extremely emaciated and anæmic, with commencing œdema of the extremities. On opening the abdomen the stomach was found adherent to the under surface of the left lobe of the liver, and was held well back. The adhesion took place all along the line of the lesser curvature of the stomach, from the pylorus to the cardiac end. The pylorus itself was surrounded by a thick hard band or ring of scirrhus cancer, interrupted only at the posterior part, where for about half an inch the ring was almost absent. A finger could very easily be passed through the pylorus. There was no dilatation of the stomach and no secondary deposit anywhere.

Remarks.—The great interest attaching to this case is the difficulty of diagnosis met with during life. I all along entertained a strong suspicion of malignancy (and expressed it) based upon the steady emaciation of the patient, her cachectic appearance, her period of life, and a family history of cancer, an aunt having died of the disease; but the fact that there were no symptoms of vomiting, and never had been, combined with the position of the painful spot well toward the left of the epigastrium, militated against and obscured a diagnosis of cancer of the pylorus. It is probable that there was some consecutive atrophy of the glands of the stomach,

and that this atrophy, even without pyloric stricture, may have produced the graver nutritional disorder that was apparent from the first; and the fact that the pylorus was adherent to the under-surface of the liver and was dragged to the left side beyond the reach of palpation, though immediately over the spot to which she always pointed as the seat of pain, was another obscuring element. The limited amount of organic change in the pylorus during the fifteen months she suffered under the affection is also interesting. The post-mortem examination was therefore specially instructive, and is my plea for publishing the case.

Airliebank, Dundee.

REPORT OF A CASE OF HYDROPHOBIA.

BY J. L. KERR, M.D. ABERD., C.M., F.R.S. EDIN.,
PUBLIC ANALYST; LATE EXAMINER IN CHEMISTRY AND IN MEDICAL JURISPRUDENCE AND TOXICOLOGY, UNIVERSITY OF ABERDEEN.

A GIRL aged eleven years was bitten upon the hand by a stray dog on May 24th, 1892. The wounds were upon the fingers and thumb of the right hand and were small, being perforations of the skin without any laceration. I cauterised them with strong carbolic acid shortly after their infliction. They healed quickly; the girl showed no symptoms of any kind and the whole incident was well-nigh forgotten. On Nov. 29th, 1892, 189 days after the hand was bitten, she began to be ill. She had no marked symptoms during the day, but ate and drank very little and complained of pain in the right forearm and elbow. In the evening of the same day she complained of inability to swallow, and said when she tried to drink "it took her breath." She also said her heart bent very fast, which it did; the pulse rate was much accelerated and the heart's action turbulent in character. The temperature was normal. The patient had an anxious look, but no other noteworthy symptoms. She either had inability to swallow or her repugnance to do so was so great that she would not try. She passed a very restless night and in the morning the respiratory spasm and the rapid pulse rate had much increased. Any efforts to swallow liquids or solids were made with great unwillingness and produced marked respiratory spasm and general muscular spasm of the whole body in a slight degree. She complained of hunger and thirst, but no persuasion would induce her to eat, drink or suck ice. She was very lively and talkative, "like as if she was drunk" her mother said, both at this time and during the quiet periods throughout the illness. Towards the evening she had short periods of maniacal delirium, for which she apologised, saying that "she could not help it for it came on her all at once." On the third morning she had increased respiratory spasm and great hyperæsthesia of the skin, for a draught of air or a touch or the fear of a touch would produce a general spasm of all the muscles of the body. During the quiet periods her pulse rate was 138 per minute and was easily accelerated by the least excitement. She ate about ten grapes with little difficulty. About half-past two o'clock in the afternoon she had a severe attack of maniacal delirium, with loud and piteous cries, lying on the floor, the limbs moving about and the body twisting from side to side in a peculiar way. At the same time she vomited small masses of solid mucus, exactly resembling nummular sputum, and from this time onwards she was unable to swallow her saliva and spat it out almost constantly. At half-past six she had general convulsions; she lay upon her back in bed, moaned piteously and then flexed and extended the upper and lower limbs very rapidly; she was cyanosed and the eyelids became swollen immediately afterwards. After the cessation of the convulsions the jaw dropped and she was unable to close her mouth completely. The weakness increased very rapidly, and about eleven o'clock in the evening she had another attack of convulsions, not so severe as the first, followed by gradually increasing paralysis of all the muscles of the body, and she died by failure of the heart at three o'clock in the morning of Dec. 2nd, 1892.

Crawshawbooth, Manchester.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

MALARIA WITH RUPTURE OF THE SPLEEN AT THE END OF THE FIRST WEEK.

BY SIDNEY J. PALMER, M.B. DURH., M.R.C.S.

THE following notes may be found of interest on comparison with a case reported in THE LANCET of Sept. 17th last by Dr. Bowie.

The patient aged twenty-six was admitted into hospital on Sept. 19th, having arrived the day before from the Danubian port Galatz, being a fireman on board a ship. He left the latter port on Sept. 3rd in apparently good health, though he was drinking freely whilst on shore. He worked in the usual manner until Sept 12th, when he was suddenly seized with shivering and vomiting and had to go to his bunk, where he was treated by the captain with quinine. The shivering fits continued daily until he arrived at Liverpool on Sept. 18th. He, however, felt better and went home in a cab from the ship; feeling worse the next day he applied to the hospital and was admitted. He was found on examination to be in a very weak condition, although he was able to walk. He was very anæmic, with marked pallor of mucous surfaces and slightly jaundiced complexion. He felt very cold. Temperature 101·6°; extremities cold; tongue clean and moist. Heart: No murmur heard, but all sounds weak and distant. Apex beat not felt, best heard in the fifth space one inch inside the nipple line. Lungs: Breath sounds normal. Abdomen: Slightly tympanitic over front. Splenic area of dulness considerably enlarged (eight inches vertical, five inches in the transverse diameter). No tenderness on palpation or percussion. Liver: Slightly enlarged. He says he has never had ague before. Had rheumatic fever a year ago; all the joints affected. No other illness that he remembers. He ascribes the present attack to having drunk largely of Danube water, with which the ship was supplied at Galatz. The patient was put to bed, hot bottles applied to the feet and quinine and caffeine given internally. Five hours after admission the patient suddenly became very blanched, complaining of great pain over the abdomen. He was found to be lying on his left side, his legs drawn up and quite collapsed. He could not move on account of pain. The left half of the abdomen was found to be absolutely dull as far as the middle line and extremely sensitive on percussion. Morphia was given, but he rapidly sank and died half an hour after the initial symptoms of collapse.

Necropsy, thirty-six hours after death.—Post-mortem rigidity poorly marked. On opening the abdomen, which was considerably distended, a quantity of dark blood escaped. On further examination a large collection of dark clot was found in the left flank, surrounding and quite hiding the spleen. On removing the spleen—which was done without any force, no adhesions being present—and the adherent clots, a ragged rent was seen to extend for three inches across the lower part of the anterior margin. The rent in the capsule, which was very thin, corresponded to the tear in the spleen substance itself and there was no stripping away of capsule from surrounding spleen substance. The parenchyma was of lighter colour than usual and very soft and diffluent. The spleen and clot weighed 3 lb. 2 oz.; the spleen separated from the clot weighed 14 oz. The liver weighed 62 oz., pale and greasy on section. Intestines shrunken and empty; nothing found on opening them. Kidneys, each 6 oz.; pale, otherwise healthy. Stomach empty; nothing abnormal found. The heart weighed 12 oz.; valves and apertures healthy; muscular substance pale and flabby. The lungs were healthy. The reason this case appears to be worth publishing is the rarity of spontaneous rupture occurring so early in the disease. The evidence that the malaria had only existed for seven days is undoubted, and I have not been able to find a case on record occurring so soon after the first evidence of malaria. Most of the cases on record have been where malaria was of some months' or years' standing, and generally preceded by muscular effort. Here, however, the patient was lying in bed at the time of rupture, and there is nothing to account for it except causes in the organ

itself. The case was admitted into the Northern Hospital, Liverpool, under the care of Dr. Barr, to whom I am indebted for permission to publish the case.

Seaton, Devon.

THE TREATMENT OF SYPHILIS.

BY J. MCNAMARA, M.B., B.CH., B.A.O. R.U.I.

THE widespread existence of syphilis and the grave importance of correctly treating it must be my excuse for discussing the best method of dealing with this mysterious disease. I will take it for granted that mercury in some form or other is the proper drug to be administered during the primary and secondary stages of the disease. The first question then is, What is the best preparation of mercury to be given in these circumstances? Since each of the numerous preparations of mercury is believed to be of benefit in syphilis, and since the only constant factor in these various preparations is the metal itself, we must suppose that it is the metal itself which is the curative agent, and not any of the substances with which it is combined. This fact suggests the answer that the best preparation of mercury is that which in safe unirritating doses contains the largest quantity of the metal; for if mercury be the enemy of the syphilitic virus, it is inconceivable that the very small quantity of the metal contained in the one-sixteenth of a grain of the perchloride can be as useful as the comparatively large quantity contained in a grain of mercury with chalk. This theoretic advantage of preparations containing a large quantity of the metal is also confirmed by experience, for one of the most convincing proofs of the value of mercury in syphilis is its rapid and striking influence over infantile syphilis. Now, mercury with chalk is the preparation most commonly given in this form of the disease; and that the cure is more rapid than in the case of adults is, in my opinion, due to the comparatively large quantity of mercury circulating in the small body of the infant. Moreover, I have seen patients progress but slowly when taking the perchloride, but rapidly improve when put on a course of mercury with chalk. But while I hold that it is of advantage to have a large quantity of mercury circulating through the tissues of the patient, this quantity must not be so large as to produce salivation, purgation, or any other injurious effect. For when the struggling tissues are injured by mercury or by any other cause, then the enemy triumphs and the worst forms of syphilis may ensue. I hold, then, that mercury with chalk is the best preparation to be given in primary and secondary syphilis. It is the least irritating of the preparations containing a large quantity of the metal. It should be continued for a prolonged period. For mild cases in young vigorous adults the treatment should last at least seven months; for more severe cases and in patients above thirty-eight or forty for not less than a year. For an ordinary adult one or two grains three times daily, with a grain or so of Dover's powder, should there be a tendency to diarrhœa, will be sufficient. This, of course, should be combined with the avoidance of alcoholic excesses and of everything calculated to lower the vitality of the patient. For tertiary syphilis the value of large doses of iodide of potassium is undoubted and needs no discussion. I may, however, remark that the common idea that iodism is prevented by the addition of aromatic spirit of ammonia or that iodism is less likely to follow large doses than small ones is not borne out by my experience. I will conclude by referring to a class of cases not unfrequently met with, where tertiary symptoms have supervened before the secondary symptoms have subsided. These cases can be conveniently treated by a mixture containing fairly large doses of iodide of potassium combined with drachm doses of the liquor hydrargyri perchloridi in decoction of cinchona.

Sutherland-avenue, W.

ASCARIS LUMBRICOIDES AS A COMPLICATION OF TYPHOID FEVER.

BY J. S. REYNOLDS, L.R.C.P. & S.EDIN.

A BOY aged fourteen years, of good family history, came to consult me on Nov. 20th, 1891, complaining of general malaise with vomiting and pain in the stomach. On the 23rd I was sent for to visit him at his home and found him suffering from the prodromitory symptoms of typhoid fever, with pale face, dark lips, scanty and high-coloured urine and severe typical diarrhœa. The temperature during the disease was characteristic, rising in the evening to fall again next morning and reaching a maximum of 104·2°. The tongue was furred at the sides and clear at the tip and middle. On the tenth day the "spots" appeared on the abdomen. The case progressed favourably, defervescence taking place by lysis. After sixteen days' apparent convalescence—i.e., Dec. 26th,—the temperature went up and the diarrhœa returned with its former severity. The symptoms ran a shorter course and once more the patient became convalescent. On Jan. 11th, 1892, the disease again made itself manifest, but until the 18th no especial symptom appeared. When making the morning visit to the patient I found that immediately before my arrival he had passed a large round worm of about ten or eleven inches long. From that date forward recovery was unimpeded and by Feb. 12th it was not necessary to continue visiting at the house. In the early stages of the disease an ordinary saline mixture, with two minims of tincture of aconite every four hours and ten-grain powders of salicylate of soda thrice daily, was given, no food being allowed beyond a simple milk diet. On Nov. 25th active delirium was present and continued for some days, the treatment being a sedative draught containing bromide of potassium and tincture of henbane to be taken at night as required. The diarrhœa was now uncontrollable. Fortunately at this very time there was a correspondence in the columns of THE LANCET concerning the treatment of this malady, more especially the diarrhœa—viz., tincture of iodine and carbolic acid—and having been adopted was followed by great success. The patient received one minim of tincture of iodine and one-eighth of a grain of carbolic acid thrice daily, the doses being doubled after three days. During convalescence he was put on an acid mixture, with sulphate of quinine. On recurrence of the symptoms the former treatment was again used with equal success; and also in the second relapse. After the voiding of the worm no other was passed, although the ordinary vermifuge was given. The only stimulant administered during the attacks was a tablespoonful of hot milk every hour or half hour as required. The case was reported under the Notification of Diseases Act and the usual hygienic measures carried out. The fever ran an ordinary course till the first relapse, which was thought to have been caused by a chill, the patient having come downstairs without permission. The second relapse was attributed to the presence of the parasite; and the question now arises whether both cases were not due to the same cause. As the case appears to me to be very rare, it may perhaps be of general interest to the profession.

Wolverhampton.

OVARIOTOMY AT THE AGE OF SEVENTY-EIGHT YEARS AND FIVE MONTHS.

BY HEYWOOD SMITH, M.A., M.D. OXON.

L. R——, single, was seventy-eight years old in February, 1892. She menstruated naturally from the age of sixteen to forty-five. The patient was first seen on May 25th. Six months ago she noticed her abdomen getting larger and was losing flesh. Examination: Abdomen large and tense, dull on percussion, slightly resonant in the flanks, fluctuation quite distinct (one wave). Measurements: (1) Ensiform cartilage to umbilicus, 7 in.; (2) pubes to umbilicus, 10½ in.; (3) right anterior superior spinous process to umbilicus, 10¾ in.; (4) left anterior superior spinous process to umbilicus, 11 in.; (5) girth at umbilicus, 37 in. Vaginal examination: Uterus movable, tense swelling in front of the uterus. On July 10th the measurements were: (1) 7½ in.; (2) 10½ in.; (3) 10¾ in.; (4) 12 in.; (5) 37 in. The operation was performed on July 12th. Incision 3 in.; pedicle thin and flat, transfixed and tied in halves with silk; wound closed with six silkworm gut sutures and one superficial. The tumour was of the right ovary and multilocular, but the secondary cysts were very few and small; it weighed 25 lb. The left ovary was atrophied. The operation lasted fifteen minutes. The stitches were removed on the 18th and on the 20th the wound was quite healed. The patient was seen on Sept. 13th. She was then quite well, getting about and gaining flesh.

As this patient was of such an advanced age I thought the case not unworthy of record.

Harley-street, W.

MUSCULO-SPIRAL PARALYSIS FOLLOWING INJURY; RECOVERY.

By W. N. CLEMMEY, M.R.C.S. ENG. &c.

ON Jan. 20th, 1892, a seaman aged forty-one was admitted to the Bootle Borough Hospital, under the care of Dr. Forbes. The patient stated that a fortnight previously while on board ship he had been thrown against the bulwarks and received a fracture of the lower third of the right humerus. It had been set by the captain and on examination was found to be in apparently good position. While in hospital union occurred and subsequently he attended for a short time as an out-patient. Shortly before his discharge signs of musculo-spiral paralysis were noted, and this tending to become worse the galvanic current with massage was periodically applied. No improvement followed and on March 30th he was readmitted for operation. A long incision was made on the outside of the forearm and the musculo-spiral nerve exposed between the supinator longus and brachialis anticus. On tracing it upwards it was found to be invested in callus at the seat of fracture. As regards the fracture itself, the lower fragment was rotated inwards and displaced upwards and forwards, so that there was formed a recess in which the nerve was lodged and compressed. About two inches of the nerve were involved in the surrounding callus which, being somewhat soft, was gouged away and the nerve exposed and completely freed. The operation was completed by closing the wound after the insertion of a drainage tube. Four days later he had pringling over the area supplied by the nerve, in those places where previously there had been anæsthesia. Fourteen days later he complained of severe pain from the wrist to the finger ends. Power of extension of the second and third phalanges was first noticed eighteen days after the operation—it of course being very slight. To aid the extensors (by preventing the opposing action of the flexors and also the natural tendency of the hand to fall pronate), a splint was kept on the flexor aspect of the arm and hand. By the time the patient was discharged three and a half months after the operation he had but partial wrist drop, while now he has completely recovered with almost full power over his hand and forearm, shown by the fact that he has resumed his ordinary occupation as a sailor.

Bootle.

PERFORATIONS THROUGH THE ANTERIOR PILLARS OF THE FAUCES.

By WALTER FOWLER, M.A., M.B. CAMB., F.R.C.S. ENG.

IN THE LANCET of July 16th, 1892, Dr. Morrice quotes a previous contribution of mine in these pages (Nov. 30th, 1889) and brings forward evidence to prove that these lesions may be caused by diphtheritic ulceration as well as by scarlet fever mischief. Whether diphtheria is responsible for the majority of the perforations or whether scarlet fever occupies the premier position is immaterial to the practical side of the question, although interesting from an etiological standpoint. The object I had in view when publishing my memorandum on Nov. 30th, 1889, was to show that these perforations were no evidence *per se* of syphilis. Dr. Morrice having actually observed them in several cases, being caused by diphtheritic sloughing, corroborates my view, and his cases and remarks are exceedingly interesting and valuable. Perforations through the anterior pillars of the fauces are discovered very frequently when investigating ear complaints. At first I certainly considered them as evidences of syphilis, but being struck with the great frequency with which they were bilateral I was led to investigate their origin; hence my contribution to THE LANCET on Nov. 30th, 1889, wherein I described their clinical features. I do not for one moment wish to assert that a unilateral perforation is *not* syphilis; where one occurs careful attention should be paid to the history, and the diagnosis of syphilis should not be inferred on this one fact alone. On the other hand, a perforation through the soft palate (a subject not now under consideration) may be confidently taken *per se* as evidence of syphilis, notwithstanding that this lesion may be very rarely caused by lupus; and also, according to Dr. Morrice, scarlet fever (which must also be rare). I may add that since my previous contribution on this subject was published I have actually seen a perforation through an anterior pillar that remained permanent, caused by the bursting of a tonsillar abscess (idiopathic); and have likewise had frequent opportunities of verifying my previous views, which I must now extend, thanks to Dr. Morrice, by the inclusion of diphtheria as one of the causes of these lesions.

Echuca, Victoria.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se compare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

PHOSPHORUS NECROSIS OF THE UPPER JAW; CHRONIC ABSCESS OF THE BRAIN.

(Under the care of Mr. FREDERICK TREVES.)

THERE are many circumstances which make it probable that the necrosis in this case was the result of exposure of the patient to phosphorus fumes. In the absence of other causes, a slowly extending necrosis of the upper jaw in a patient with a history such as this may safely be ascribed to the effects of the phosphorus. It is luckily unusual at the present day to meet with necrosis of the maxillæ due to this cause, the effect of Larinser's paper on the subject in 1845, the contributions of Wilks, Bristowe, Simon and others in this country being to clearly demonstrate the cause and point out the remedy. Suppurative meningitis is rarely a cause of death in these cases, but a case is recorded which was under the care of M. Hervieux at the Hospital Necker, in which the patient, a lucifer-match maker, had necrosis of the lower jaw, the upper jaw and afterwards of the bones of the palate, the bones entering into the orbit and the frontal. He died with brain symptoms. Pus was found between the dura mater and the brain.[1] For the notes of this case we are indebted to Mr. H. M. Speechly, house surgeon.

A dipper in a Scotch match factory was admitted into the London Hospital on Oct. 11th, 1892. His age was forty-nine, but he had the appearance of being much older. He was thin and anxious-looking. He had worked at his trade for thirty years without suffering any inconvenience therefrom until about nine months previously to admission. The first symptom complained of was toothache in the right upper jaw, which troubled him continuously for four months. He then had some decayed teeth removed. Shortly after the gum tissue sloughed off the jaw, part of which became exposed. On May 9th some dead bone was scraped away, which gave him some relief. Gradually, however, the necrotic process spread, and a very offensive discharge, previously slight, caused him much distress during the interval between the month of May and the time of his admission into the London Hospital. For six months previously to admission he complained continually of severe headache in the frontal and occipital regions. He could bear no hard covering on his head, so he always wore a soft cloth cap. The headache was almost constant and prevented him from sleeping. His pupils were normal. On Friday, Oct. 14th, Mr. Treves operated. The sequestrum was found to include the whole of the right upper jaw, below the level of the infra-orbital foramen, and was bathed in pus of the foulest description. The cavity, after being washed out, was stuffed with iodoform gauze. The after treatment consisted in irrigating the cavity hourly with a lotion of carbolic acid (1 in 80) and the patient was placed on a liberal diet. From Oct. 11th to the 23rd the temperature was never high; it varied from 97·6° F. as the lowest

[1] System of Surgery, Holmes and Hulke, p. 477, vol. ii., 1883.

point to 99·8° as the highest, being usually about 99°. Until Oct. 23rd the patient appeared to be doing well; his headache had almost gone, he slept well and was very cheerful. He was disinclined to get up, but was preparing to return home on Oct. 24th. At 3 A.M on Oct. 23rd, eight days after the operation, on being aroused to have his mouth washed out as usual it was found that he had become unconscious. The temperature, too, had risen to 104°. On attempting to do anything for him he resisted and became very irritable and difficult to feed; he was also very restless and kept groaning and putting his hand to his head as if in pain; he vomited once some greenish mucus. Heart, lungs and abdomen showed no signs of disease; no motor or sensory paralysis; pupils contracted but equal and reacted to light.

Oct. 24th.—Patient fed by suppositories and with difficulty induced to take about a pint of milk during the night. Temperature between 99° and 100° during the night; pulse 84, full but compressible; respiration easy, equals 32; pupils normal; knee-jerks slightly exaggerated on both sides, with ankle clonus. Some twitching movements had been noticed in the left hand. Very restless; groans continually. Urine drawn off by catheter.

25th.—The patient has been more apathetic for the last twelve hours. He has taken milk by the mouth and is now passing urine and fæces under him; no vomiting; pupils contracted, equal, and respond slightly to action of light; groans continually; cheeks puff in and out with respiration, but no stertor; respiration 28 per minute and diaphragmatic; pulse full, but easily compressed, 108; skin warm; sweating freely on head and face; right palpebral fissure wider than left, the eyelids being partially closed; fundi normal, except for some enlargement of veins. The patient's condition was now desperate. On the afternoon of this date, after consultation with Dr. Stephen Mackenzie, Mr. Treves decided to trephine in the hopes of liberating any collection of pus that might have formed in the brain. By means of a two-inch trephine the skull was opened over the right motor area and a small trocar and cannula passed in several directions into the right hemisphere without result. The patient succumbed an hour after the operation.

The post-mortem examination was made on Oct. 27th by Dr. Percy Kidd. The pleuræ, larynx, trachea and bronchi were normal. In the upper lobe of the left lung at the lower margin was a small abscess the size of a Spanish nut with a slightly developed capsule. There were a few ill-defined reddish nodules in the posterior part of the lower lobe (broncho-pneumonic). No morbid change of any importance was discovered in any other of the viscera. Brain: Diffuse, purulent meningitis of base, less extensive over vertex. At the apex of the right temporo-sphenoidal lobe was a small encapsuled abscess, close under the cortex. It was evidently of long standing. Both lateral ventricles were filled with pus. In the right ventricle the ependyma was distinctly thickened and of a greenish-red colour. The suppuration was evidently not recent. The brain tissue around the right ventricle was softened and numerous punctiform ecchymoses were seen. In the left lateral ventricle gelatinous greenish pus was found, but there was no thickening of the ependyma and the brain around was normal. The rest of the brain was healthy. The right cavernous sinus was occupied by a softening and stinking clot. On removal of the brain the foramen rotundum was found to admit a cedar pencil and to lead into a large space from which the greater part of the superior maxilla had been removed. The edges of the enlarged foramen rotundum were necrosed and greyish in colour. The parts of the superior maxilla remaining and also the body of the sphenoid were greyish and necrosed.

Remarks by Mr. TREVES.—The removal of the large sequestrum was effected without the least difficulty. A few taps from the chisel set it free. The patient was allowed to get up a few days after the operation, but he was rather inclined to remain in bed, stating that he had arrears of sleep to make up. There was no sickness after the operation, and he vomited only once during the whole progress of the case. He was an active-minded and intelligent man. The abscess of the brain was evidently of long standing and was due to direct extension from the seat of disease. A sudden lighting up of the inflammatory trouble brought about the fatal termination. The long period during which the abscess on the right side of the cerebrum remained dormant is illustrated by many other cases of cerebral abscess. The patient's condition at the time of the operation was desperate, and considering the liberal manner in which the trocar was used the non-evacuation of the abscess was remarkable. The pus in the abscess on the right side was very thick.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.

THREE SURGICAL CASES.

(Under the care of Mr. PYE-SMITH.)

WE have frequently published in THE LANCET examples of the secondary effects of otitis media, and this case also illustrates them well. The cerebral abscess might probably have been cured had not septic phlebitis and thrombosis occurred. Perhaps this complication could have been successfully dealt with by evacuation or excising part of the lateral sinus and jugular vein; but apart from the difficulty and risk attending such an operation the patient's condition was thought not to admit of it. The case also emphasises the necessity for treating patients suffering from chronic otitis media whilst the continuance of the disease is indicated by the presence of a discharge. For the notes of these cases we are indebted to Mr. G. Wilkinson, house surgeon.

CASE 1. *Cerebral abscess secondary to purulent otorrhœa; drainage of abscess; thrombosis of lateral sinus; pyæmia; death.*—A child aged ten years was sent to the hospital by Mr. W. W. Banham on April 20th, 1892, with cerebral symptoms secondary to otorrhœa. The history was that for eighteen months the patient had had discharge from the left ear, with deafness. The discharge had occasionally ceased for a time, when the deafness had became worse, but she had not complained of headache. She is supposed to have had measles two years ago, but was not seen by a medical man. There is no history of a blow on the head or ear. On April 17th she began to complain of headache, which gradually increased in intensity and was not localised. Vomiting came on shortly after, the patient ejecting everything she took. There were no convulsions. On the 18th she was seen by Mr. Banham, and immediate removal to the hospital was advised. As she seemed somewhat better on the 19th her parents delayed to send her. On the 20th the headache was again severe, so she was sent in. After admission she complained of no further headache, nor did she vomit. She seemed, however, nervous and irritable, constantly crying to go home and being very backward to answer questions. There was a purulent, offensive discharge from the left ear, no tenderness or œdema over the mastoid process or below it, or over any part of the skull. In the meatus were some prominent granulating discharging pus. She declared herself unable to hear the ticking of a watch held close to the ear on the left side, though she could on the right. Examination of the optic discs showed slight fullness of the veins but nothing more. The temperature rose to 101° on the 21st. On the 22nd she seemed to be going on well and took food well, but about half-past five in the evening, without premonitory symptoms, she was seized with convulsions. There seems at first to have been drawing up of the right arm and turning the head to the right side. Then clonic spasms succeeded. When seen by the house surgeon about three minutes after the commencement of the fit the patient was lying on her back, the head being turned to the right, the eyes to the left and upwards. There were clonic spasms of the face, eyes and neck and all the limbs, the left side being most affected. In a few seconds the spasms became more violent on the right side. The breathing was short and jerky and the pulse very rapid. The fits continued for about ten minutes without intermission, after which the child remained comatose, the face cyanosed, the breathing jerky, with long intervals and somewhat stertorous. She perspired profusely. Other spasms of short duration succeeded. There was some hæmorrhage from the left ear. The temperature rose to 102·4°. At 9.30 she was seen by Dr. Burgess in consultation with Mr. Pye-Smith, and immediate operation was advised. At 10 P.M. the operation was commenced without an anæsthetic, the patient being comatose. There was slight conjunctival but no pupil reflex. The point selected for the trephining was an inch and a half behind and an inch and three-quarters above the left auditory meatus. A flap was raised from the bone around this point and a three-quarter inch trephine applied. The skull was exceedingly thin. When the bone had been raised the dura mater was incised and there was some troublesome hæmorrhage from one of the pial vessels. The brain bulged. A trocar and cannula were thrust downwards, forwards and somewhat inwards towards the roof of the tympanum. At the first thrust pus was struck two inches below the surface; about three drops only were obtained; it was very fetid. A larger cannula and

trocar were now used, but no more pus was obtained. A track was next made in the brain tissue with a small Volkmann's spoon in the direction of the cannula, but no more pus was found. A small-sized rubber drainage-tube was put in and brought out through a hole in the flap, which was then replaced and sutured. The mastoid antrum was next sought for immediately behind the upper half of the auditory meatus. A chisel (three-sixteenth of an inch) and a gouge were used for removing the bone. The wall of the lateral sinus was exposed posteriorly, but as far as could be judged the sinus was free from thrombosis. Finally, the mastoid antrum was opened by working in a forward direction and a communication with the middle ear established. No pus was evacuated. A small rubber drainage-tube was passed through the wound into the middle ear. Some granulations on the posterior wall of the auditory meatus were scraped and dead bone found below them, which was scraped away as far as possible. Both wounds were now dressed with iodoform, alembroth gauze and sublimate wool, a piece of gutta-percha tissue being placed over the upper dressing to keep the two separate as far as possible. The operation lasted about two hours. The patient stood it well and partially regained consciousness. She evidently felt the second skin incision. The pulse after the operation was 150 and the temperature normal. She passed a fair night, lying quite passive unless disturbed. The temperature rose to 101·8 during the night but was normal in the morning, when the pulse was 128.

April 23rd.—She takes small quantities of milk well. She cannot be got to answer questions, but cries out when the head is being dressed or when she is moved. On the first dressing there was a small quantity of serous fluid from the auditory meatus, distinctly offensive. No purulent discharge from either of the tubes. Later in the day she became very restless, pulling at the bandages and calling "Mother" and "Oh, dear!" Twenty grains of bromide of potassium were given and ten grains ordered every four hours. An ice-bag was applied over the dressing and the hands tied. She continued in much the same condition till the afternoon of the 24th, when she became more conscious and recognised her father. The improvement continued until the 25th when she could apparently understand what was said to her. Temperature 100° in the evening, pulse 120. On the 26th the temperature rose to 101° and some pus came from under the flap over the trephine wound; none from the tube in the brain. She seemed more apathetic. This condition became more marked every succeeding day. On the 28th the discharge from the ear had become copious and very offensive. Tenderness and puffy swelling were now observed below the mastoid process with some hardness in the line of the internal jugular vein. Her condition was, however, considered to be too critical for further operation. The head was much retracted and kept turned to the left, the muscles of the neck and back rigid, the tongue and lips dry, the teeth covered with sordes and the complexion dusky. No dulness or physical signs of disease was found in the chest.

On May 1st a considerable quantity of greyish, very offensive pus came from around the tube in the brain, after which the patient seemed to rouse herself for a short time from the semi-comatose condition in which she was. She opened her eyes and seemed to take some notice of what was going on. The temperature fell from 103° to 99°. It rose, however, on the 2nd to 103·2° and finally to 105°, the patient dying in a comatose condition in the afternoon.

Necropsy.—An abscess cavity about the size of a hazel nut was found in the brain substance just above the roof of the tympanum. The membranes were adherent to the bone at this spot, and there was some inflammation around. The purulent track through which the drainage-tube had passed led down to this, but had evidently failed to drain it. There was a septic thrombus in the left lateral sinus, extending some distance down the internal jugular vein. In both lungs were found a large number of small, recent pyæmic abscesses, though there were none in the other viscera. There was no fluid in the chest.

This was probably a case of the usual ileo-cæcal variety of intussusception. It is of interest as showing that distension of the lower bowel by water may succeed when that by air fails. If a tube and funnel be used, as in this case, there would seem to be less danger of rupturing the bowel by water (unless the funnel be held very high) than there is by air, which must always be injected with considerable force, and the entrance and exit of which cannot be so easily regulated.

CASE 2. *Intussusception reduced by water.*—A male infant aged seven months was brought to the hospital about 6 P.M. on April 21st. He was a robust, well-nourished child, quite healthy up to the onset of the present attack. The history was that about 3 P.M. the child had apparently been seized with great pain in the body, had begun to scream and toss itself about, kicking his legs and doubling up his body. Any pressure on the body seemed to increase the pain. He had been sick repeatedly, but there had been no action of the bowels or tenesmus. On inquiring it was found that the bowels had been opened about twice daily, and on the morning of the 21st had been opened twice. The patient had been fed entirely at the breast, but about 1 P.M. on the day of admission had had a small piece of pudding (boiled dough and treacle) given to him by his sister. On examining the abdomen it was thought that there was a tumour on the right side, but the muscles were so rigid and the child so restless that it could not be made out for certain. Nothing was felt per rectum. At 8 P.M. the child was seen by Mr. Pye-Smith in the absence of Mr. Thorpe. He was then quiet and the abdomen flaccid and not distended. A distinct sausage-shaped tumour could be made out lying across the abdomen above the umbilicus. With the finger in the rectum the left extremity of this could be felt through the bowel wall, feeling like the dimpled end of an intussusception. 9 P.M.: Ether was given and abdominal taxis was tried for about ten minutes without effect. Air was next injected through a valveless Higginson syringe, which was clamped by the fingers alternately on the distal and on the proximal side. The tumour was decidedly lessened, but was not quite reduced. A second inflation was made after a while, but the tumour did not entirely disappear. 9.40 P.M.: As the tumour was still felt, a normal saline solution was made to flow into the rectum through a tube attached to a funnel held three feet above the bed. About a pint and a half was thus introduced, and the abdomen became much distended. On removal of the tube much of the fluid escaped. About twenty minutes were occupied in this proceeding, after which no distinct tumour could be felt. Half a drop of laudanum was administered, to be repeated every hour unless the pupils became contracted. The child had no further symptoms. He was fed per rectum and kept under the influence of opium for two days, after which time he was again fed at the breast and made an uninterrupted recovery. On the 24th the bowels were opened, the evacuation containing blood and mucus. On the 27th they were opened freely without blood or mucus. The patient was discharged on May 6th, quite well.

The association of the symptoms, deafness, tinnitus, vertigo, vomiting and forcible falling movements towards the affected side are familiar as occurring in paroxysmal attacks in Ménière's disease, and would suggest the conclusion that the part injured by the fall was the same as that affected in that disease. The site of the lesion in Ménière's disease is, however, a matter of dispute. The blow over the mastoid process might readily cause damage to the internal ear and semicircular canals, which Knapp and other writers believe to be affected in Ménière's disease. Had a hæmorrhage occurred into these parts the symptoms could scarcely have been so transient. In view of the paroxysmal nature of the attacks in Ménière's disease, Dr. Wilks believes the primary seat of the disturbance to be in the brain, affecting chiefly the auditory and probably contiguous "equilibrium centre." If in this case we are to refer the injury to the brain, one would expect the concussion to be transmitted mostly to the temporo-sphenoidal lobe and cerebellum. The temporo-sphenoidal lobe is supposed to contain the auditory and "equilibrium centre," and an injury to the cerebellum would account for "forced movements" towards the same side, nystagmus and frequent vomiting.

CASE 3. *Head injury, with unusual symptoms.*—A child aged eight was brought to the hospital on the night of Sept. 7th with a history that she had been pushed down by another girl, and had struck her head on the pavement. She had not lost consciousness, but seemed dazed for a short while. On raising her the mother found the child could not walk. On questioning her she complained of pain in the left side of the head and of feeling dizzy and dazed. On examining the head a bruise was found over the left mastoid process and zygoma. There was incessant and somewhat violent nystagmus in a lateral direction, which increased when she was told to look at the finger or to follow the finger with her eyes. The movements were most marked when she was looking towards her right and upwards. There was also slight convergent squint. The mother said she had noticed the eyes working at times before the accident,

She was asked to sit up, but appeared to be unable to do so. When supported in a sitting position the body was forcibly bent over towards the left side; when unsupported she fell forcibly towards the same side. She was put to bed and kept quiet for an hour, after which she seemed to have got over the dazed feeling—in fact, she seemed a very intelligent child and readily answered the questions put to her. She complained of a noise in the left ear like the ringing of a bell; both ears were rather deaf; the ticking of a watch could only be heard within a distance of four inches, but readily when placed over either mastoid process; she said she had had a discharge from the right ear from time to time; there was no sign of paralysis of sensation or motion in any part, nor was there loss of coördination, the patient being able to place the forefinger on the tip of the nose or heel or opposite the great toe when the eyes were closed without hesitation; the knee-jerks and superficial reflexes were normal. During the first hour she vomited three times. The optic dics appeared normal and the temperature was normal.

Sept. 8th.—She vomited once in the night and once this morning. She still leans to the left in the sitting position and falls when unsupported, though less forcibly. The nystagmus and tinnitus are less. The temperature is normal.

9th.—She has vomited three times since the last note. She can now sit and stand fairly steadily. The nystagmus and tinnitus are diminishing.

13th.—The vomiting has continued from time to time till to-day. There are still slight nystagmus and tinnitus, but no vertigo or convergent strabismus.

Oct. 4th.—There has been no vomiting since Sept. 13th; there is slight nystagmus on slight lateral movement of the eyes; there is no tinnitus, vertigo or unsteadiness in standing with the eyes open; when the eyes are closed she sways a little; there are slight choreiform movements of the arms and head.

17th.—She can now hear the watch at three feet from the left ear, but only one foot from the right ear. There is still slight nystagmus and choreiform movements.

Nov. 3rd.—The nystagmus has now disappeared; the only symptoms are the choreiform movements; the optic discs are normal. The child was discharged to-day.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Sugar in the Urine during the Puerperal State.

A MEETING was held on the 7th inst., Dr. J. Watt Black, President, in the chair.

Drs. FREDK. J. MCCANN and WILLIAM ALDREN TURNER communicated a paper on the Occurrence of Sugar in the Urine during the Puerperal State. They having investigated a series of 100 cases arrived at the following conclusions: 1. That sugar is present in the urine of women during lactation. They assume with Hofmeister that this sugar is milk sugar. Glucose may also be found. 2. That sugar is present at some period in every case. 3. That in the majority of cases the largest amount occurs on the fourth and fifth days of the puerperium. 4. That the quantity depends on (*a*) the condition of the breasts; (*b*) the quantity and quality of the milk; (*c*) the suckling of the child. Of 100 cases the average quantity found was 0·35 per cent.—i.e., one grain and a half per ounce. 5. That when lactation is diminished or suppressed the amount of sugar diminishes or disappears. 6. That when the production and exhaustion of the milk are equal the amount of sugar is very small.

Dr. A. ROUTH asked if any of the cases had been followed so as to ascertain whether the glycosuria persisted.

Dr. BOXALL mentioned the case of a suckling woman who was admitted into University College Hospital for repair of a ruptured perineum and whose urine was loaded with sugar. The operation was postponed for a week or two, when the sugar had disappeared. When resident at the General Lying-in Hospital his observations as regarded the presence of sugar in the urine of lying-in women completely coincided with the conclusions stated in the paper.

Dr. HORROCKS pointed out that the paper was on a physiological and not a pathological subject. The cases were not diabetic and in none of them, therefore, was there any reason for hesitating to perform any operation required. In true diabetes the fear of operation might induce coma, but otherwise he knew of no reason for not operating upon diabetic patients.

Dr. WHEATON agreed in the main with the results arrived at, but he did not think sugar was so frequently present as stated in the paper. Normal urine always contained a small amount of copper-reducing substances. In the cases where only 0·17 per cent. of sugar was found he thought the reduction of the copper was probably due to the excess of uric acid and urates generally present in the early part of the lactation period. Drs. McCann and Turner had not shown that the sugar present was really lactose and he asked if they had found any test to distinguish between it and dextrose or diabetic sugar. It seemed a most unusual thing that the secretion of a gland should be reabsorbed, and it would be important to ascertain whether the sugar existed in the blood during lactation. He had found that where a considerable amount of sugar existed in the urine of the mother it was present also in that of the infant, suggesting that the sugar was incapable of assimilation and was of a more or less poisonous nature, and that its presence in excess might be injurious to the child. He thought the sugar in the urine of pregnant women might be due to congestion of the liver, which was present, or to a ferment in the mother's blood producing a similar effect by the decomposition of glycogen.

Dr. CULLINGWORTH suggested an alteration in the heading of the last column of the main table and this was at once accepted by Drs. McCann and Turner.

Dr. LEWERS asked whether, in addition to Fehling's test, that by potash and the specific gravity had been noted.

Dr. GRIFFITH thought the probable explanation of the presence of sugar in urine of nursing women was that it is a resorption process from the mammary glands, varying in quantity with the activity of the secretion and the difficulty with which the breasts were emptied, and, as had been suggested, possibly with the composition of the milk.

In reply, Dr. MCCANN thanked the Fellows for the reception given to the paper. The observations were made on 100 cases and over 1400 samples of urine tested. They had followed strictly the method of testing with Fehling's solution advocated by Sir W. Roberts—viz., (1) avoid prolonged boiling; (2) allow suspected urine to stand twenty-four hours before deciding that it does not contain sugar; (3) do not add excess of urine. Dr. McCann pointed out the importance of distinguishing between glycosuria and diabetes. Glycosuria without constitutional symptoms is of little importance. Unfortunately the cases could not be traced, as lactation is stopped when the patients leave the hospital. The only method of distinguishing between glucose and lactose is by the polariscope, and where much sugar is present in the urine, probably accompanied by a large amount of lactose in the milk, the nutritive value of the milk is diminished. Various tests had been employed; the quantitative estimation was made with Pavey's solution. He pointed out the many important points still requiring elucidation, such as the composition of the milk, its nutritive value and the condition of the blood during lactation.

Dr. GRIFFITH communicated notes of a case of galactorrhœa occurring during a first pregnancy in a patient under the care of Dr. Fentem of Bakewell. The excessive flow of milk (which amounted to a pint daily) continued during the whole period of gestation, and the treatment, which consisted in the administration of iron and quinine with pilocarpine and in firmly bandaging the breasts, was apparently without material benefit.

The following specimens were shown:—

Dr. HORROCKS: (1) Long forceps, (2) Uterine Sound, (3) Saline Transfusion Apparatus.

Dr. RASCH: Woman, subject of Osteomalacia, cured by Excision of the Ovaries.

Dr. LEWERS: Papilloma on Peritoneal Aspect of Ovarian Cyst without other Peritoneal Infection.

Dr. A. ROUTH: Deformed Fœtus.

Dr. BOXALL: Placenta Prævia of unusual size and shape.

HUNTERIAN SOCIETY.

Influence of Protozoa in certain Diseased Conditions.

A MEETING was held on Wednesday, Dec. 14th, F. GORDON BROWN, M.R.C.S., President, in the chair.

Dr. JAMES GALLOWAY made a communication to the Society respecting the above. The general term "Protozoa" was preferred as certain of the parasitic forms were of doubtful classification. The well-known psorospermic disease of young

rabbits was taken as the basis, and the main symptoms of this affection described, as observed in the young and in the adult animal, including, as easily recognised signs, emaciation, severe illness and acute enteritis. The main stages in the development of the parasite (coccidium oviforme, Leuckart) were then described. The lesions caused by it in the liver and in the intestine were referred to in detail, and the importance of the condition as giving an example of the infection of epithelial cells by a parasite which undergoes one stage of its development within the epithelial cell, was emphasised. The method by which the parasite gains access to the cell was suggested to be by movements on the part of the invading organism, either alone or possibly aided by movements on the part of the epithelial cell itself. The stage of development undergone external to the body was said to be of great importance in reference to the infectious rather than contagious character of the disease. The close resemblance of the growths observed in the organs of the host to adenomatous tumours was shown. Coccidial infection in the human subject was alluded to. The question of protozoa occurring as parasites in malignant tumours in the human subject was then considered, and many forms of epithelial cell inclusions which had been described as parasites were noted, and arranged roughly as follows:—1. The invagination of one epithelial cell within another. 2. The occurrence of invading leucocytes within epithelial cells. 3. The endogenous formation of cells, possibly by direct division of the nucleus without division of the cell body, or more probably by asymmetrical karyomitosis of the cell nucleus, giving rise to several masses of chromatin bodies within one cell wall. 4. The various forms of degeneration of the cell body or its nucleus, such as the colloid &c. Many of the so-called parasites were caused by one or other of these processes. Certain other cell inclusions had been described by some observers abroad and by Dr. Ruffer and Mr. Walker in this country. Dr. Galloway was able to confirm in almost every particular the appearances described by these authors. The occurrence of the inclusions within the cell body, occasionally also within the nucleus itself; the structure of the inclusions, consisting in the adult condition of a very distinct capsule, enclosing one or more very obvious, brightly staining bodies; the radial striations passing from the periphery towards the centre; the variations in size indicating various stages of growth; the completely distinct staining reactions shown by the inclusions when compared with the nuclear chromatin of the epithelial cells and its degeneration products, were mentioned as clearly differentiating these bodies from any form of cell degeneration and guiding to the conclusion that, in our present state of knowledge, these inclusions must be regarded as parasitic protozoa, probably having very distinct effects on the epithelial cell growth and possibly even on the causation of the malignant tumours in which they have been found. The importance of careful histological methods was strongly emphasised and the cause of many of the doubtful accounts of "cancer parasites" was ascribed to imperfect methods of preparation. The demonstration was illustrated by drawings, by the use of the lantern and by microscopic preparations.

Dr. RUFFER expressed his entire agreement with Dr. Galloway's conclusions, and added some account of his investigations into the development of the parasites. Contrary to his first belief he could now with more perfect methods see the intranuclear form of the parasites in every specimen of cancer he examined. It first appeared as a little round body staining by hæmatoxylin, which approached the periphery of the nucleus and then escaped and lay free in the protoplasm of the cell. There might be one or many of these bodies and in some cases the nucleus actually burst. He knew of nothing in human pathology which would correspond to this unless it were a parasite. He had been able to see the living parasite in fresh juice scraped from a rapidly growing cancer of the breast placed in normal physiological fluid on the stage. It looked just like an amœba enclosed in a capsule, putting out pseudopodia to the periphery and withdrawing them. As to the part these bodies played in cancer he could only say that there was no reason against the supposition that some of them might be the actual cause of cancer. A nucleus containing the parasite was hardly ever to be seen dividing, but where cells were dividing the parasite was found in the neighbourhood. His suggestion was that the bodies produced karyokinesis in the cells around and thus caused the cancer growth.

Fibroid Degeneration.

Dr. ARNOLD CHAPLIN showed specimens of Fibroid Induration of the Lungs. The patient was a woman aged forty-one years who had suffered from cough for many years with little emaciation. At the necropsy the upper lobes of both lungs were found densely invaded by fibroid growth without much thickening of the pleuræ; there were some small, smooth-walled cavities in the right lung and masses of calcified and caseous material in the bronchial glands. The kidneys and liver showed evidence of chronic fibroid change. Dr. Chaplin submitted the case as an instance of general fibroid degeneration due to a fibroid diathesis and distinguished clinically by its onset after acute lung disease, by its slow apyrexial course and the absence of tubercle bacilli. An acute deposition of tubercle may occur near the close.

PROVINCIAL MEDICAL SOCIETIES.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—At the meeting of this Society, held on Dec. 6th, Dr. J. H. Bell, President, in the chair, Dr. MAJOR showed a boy aged fifteen whose father had died a short time since of general paralysis, whilst the mother was mentally defective, suffered from slurring speech and probably was on the verge of the same disease. The boy himself was formerly bright and intelligent and a good singer. He first came under observation in February last for choreiform movements, attacks of headache and vomiting. He was treated with arsenic and improved. Later stammering came on, with tremors of the tongue and lips and liability to fall in walking. Mental impairment has developed, but is not very considerable; it is chiefly loss of memory and a silly expression. No hallucinations, optic neuritis, nystagmus or visual defects. The case is reported on account of the youth of the patient. Cases at seventeen and sixteen have been reported in this country and one of fourteen on the Continent.—Dr. RABAGLIATI showed specimens of Ovarian Sarcomata he had recently removed. The first patient, aged forty-one, had noticed a movable tumour like an egg. On operation ten and a half pints of ascitic fluid escaped and an egg-shaped tumour, weighing four pounds and a half, was removed. Histologically it was a spindle-celled sarcoma with some myxomatous degeneration.—Dr. MAJOR also showed a specimen of an old Hydatid Tumour of the Liver from a man aged sixty-six. The right lobe of the liver contained a tumour the contents of which formed a fæcal-like mass in which no hooklets could be found, but microscopical examination revealed the characteristic laminated membrane of hydatid cyst.—Dr. KERR spoke of the Hypnotic and Hysterical Conditions as similar, and although hypnotic treatment could not cure disease yet it was sometimes the only means available for removing symptoms. The knee-jerk is exaggerated if a patient is directed to concentrate all his voluntary power in one direction—as tightly closing eyes, clenching the jaws or fists. It is said that the tonic control exercised by the cerebral cortex on the lower centres is thereby decreased. In the case of an epileptic aura referred to a limb a tight ligature is applied, and in some cases the stimulus is said to act on the cortical centres affected and avert the threatening discharge. In hypnotising the cerebral balance is disturbed; all the cortical effort, as it were, is turned in one direction and self-control is abolished, the patient's nervous system becoming a complicated mechanism of reflexes. In conclusion, the speaker demonstrated the various hypnotic and post-hypnotic phenomena produced by suggestion.—Drs. GOYDER and RABAGLIATI joined in the discussion, which was adjourned for a month.

LIVERPOOL MEDICAL INSTITUTION.—A new and successful departure was adopted at the Medical Institution by devoting the whole of an evening to the study of clinical cases. The upper suite of rooms was thrown open, and screens were placed between the patients. Over sixty cases were shown, including those of medical, surgical, eye, ear and skin diseases. Eighty members of the institution were present, a number of country members and visitors availing themselves of the opportunity of seeing the more interesting cases at the time in the Liverpool hospitals. A discussion on some of the more important cases terminated the proceedings. Messrs. Barraud's portrait of the Members and Associates of the Liverpool Medical Institution was hung upon the walls for the first time. For the success of this original idea the members are indebted to the indefatigable secretary of the ordinary meetings, Dr. George G. Hamilton, who was warmly congratulated by many members on the results, and a hope was expressed that the successful experiment would be repeated.

MANCHESTER MEDICAL SOCIETY.—At a meeting of this Society, held on Dec. 7th, Mr. A. W. Stocks presided.—Dr. REYNOLDS showed a case of Male Hysteria in a patient aged sixty-six who exhibited very markedly the trepidant variety of the so-called symptom—complex "astasia-abasia." He pointed out that this was probably no new symptom, but merely a new name for the well-known difficulties of walking and standing as met with in hysterical and neurasthenic patients. The patient also had other hysterical symptoms, as retraction of the field of vision, irregular patches of anæsthesia &c. Dr. Reynolds also showed (1) a case of Hereditary Chorea coming on about the age of six, the patient's father having suffered from adult chorea; (2) a case of Bilateral Chorea following an attack of slight right-sided hemiplegia in a male adult; and (3) a well-marked case of Hysterical Chorea in a girl who also had hemianæsthesia.—Dr. EDGE mentioned a case of Aortic Regurgitation, in which a presystolic murmur had been frequently heard, and expressed the opinion that it would prove to be one of the cases first described by the late Dr. Flint, in which after death no mitral lesion could be discovered. Dr. Edge also mentioned a case of Mitral Stenosis, in which the presystolic murmur was unusually well conducted to the left and could be heard at the back. A loud rough murmur was also heard in this case over the pulmonary area. After excluding other causes this murmur was considered to belong to the group described by Quincke, in which, owing to retraction of the left lung, the pulmonary artery comes in contact with and is thus flattened against the parietes at each systole and a murmur produced. Allusion was also made to Dr. Bramwell's opinion that this murmur is exocardial and caused by the pericardium covering the root of the pulmonary artery being roughened by a deposit of lymph and rubbing against the chest wall.—Dr. T. HARRIS related the result of a number of post-mortem examinations in cases of Mitral Stenosis and Cardiac Dilatation, which showed that in the cases where the deep cardiac dulness extended as high as the second left interspace it was due to the enlargement of the conus arteriosus of the right ventricle and that the left auricle in the cases which he had observed was either not seen at all from the front or only the tip of its appendix was visible. Dr. Harris also referred to the difficulty which such cases sometimes presented in diagnosis, as the dulness resembled closely that caused by pericardial effusion.—Dr. LEECH showed a case of Mediastino-pericarditis. The boy came under observation in August, 1890, and at this time had bronchitis, greatly enlarged liver, ascites and anasarca, and a slight cyanotic condition. There was well-marked pulsus paradoxus. The jugular veins were distended, but did not increase in size during inspiration. There was slight increase of cardiac dulness, but no evidence of valvular disease. Save for the disappearance of dropsy the boy has continued in much the same state since 1890, but increasing emphysema has rendered the area of dulness in the cardiac region less marked. At the present time pulsus paradoxus is not so well marked as formerly. The respiration is markedly abdominal, and during inspiration the heart beat can be felt very distinctly in the 6th space as if it were dragged down by the diaphragm, whilst in expiration the heart in this space is almost absent.

MANCHESTER PATHOLOGICAL SOCIETY.—At a meeting of this Society, held at the Owens College on Dec. 14th, Dr. Judson S. Bury, President, in the chair, Mr. F. H. W. COTTAM exhibited a Skull showing an aperture through the bone two inches and a half long and seven-eighths of an inch broad, situated in the upper frontal region close to the mid-line. The patient had been an inmate of the County Asylum, Prestwich, and had inflicted the above injury on himself with a carpenter's axe. Death occurred twenty-four days later after the formation of a cerebral abscess.—Dr. THOMAS HARRIS showed specimens from two cases of Primary Malignant Disease of the Pleura. Microscopically the one growth presented the character of a squamous cell epithelioma. The other was of a cylinder cell type. Dr. Harris referred to the rarity of such cases and to the subject of the development of neoplasms of the cancer type in tissues which, like the pleura, are developed from the mesoblastic layer of the embryo. Although he felt that recent embryological researches and also much of our pathological knowledge might be against the view of primary epithelial malignant tumours arising in tissues developed from the mesoblast, he nevertheless held that occasionally, though certainly rarely, such tissues did give rise to such growths.—Mr. J. W. SMITH showed the preparation from a case in which Suffocation had resulted from Ulceration of a Suppurating Bronchial Gland into the right bronchus. The patient a girl of three, who was supposed to be choking from a piece of toffee, was brought to the Manchester Royal Infirmary in a moribund condition. Tracheotomy and artificial respiration were performed without success. At the necropsy an oval ulcer with ragged edges was found on the outer and posterior wall of the right bronchus. It communicated with the cavity of a caseous bronchial gland. A flocculent slough the size of a horse-bean lay at the bifurcation of the trachea. Caseous nodules were scattered through both lungs.—Finally Dr. R. T. WILLIAMSON exhibited and described sections of the cord in a case of Acute Myelitis simulating Hæmatomyelia. On the day of the onset of the symptoms the patient got up apparently quite well, but while drawing up the window blinds found herself suddenly unable to use her arms. An hour later both legs became paralysed. Then followed paralysis of intercostals, bladder and rectal symptoms, analgesia and thermo-anæsthesia on the left side below the seventh rib and hyperæsthesia on the right side. Death occurred in forty-two days. Examination of the cord revealed myelitis affecting chiefly the grey matter of the lower cervical and upper dorsal regions. The left posterior horns were much more affected than the right. There was no evidence of hæmorrhage at any part.

MIDLAND MEDICAL SOCIETY.—At the second ordinary meeting of this Society, held on Nov. 16th, Mr. Eales, President, in the chair, Dr. MARSH showed a Papilloma removed from the Larynx of a patient and the patient herself. There had been a history of some laryngeal trouble for eighteen months; never any dyspnœa or pain. On examination a small papilloma was seen on the free edge of the left vocal cord, about its centre, and a group of three or four smaller ones at the anterior commissure. They were incised with a laryngeal knife and removed with Mackenzie's forceps. The patient's voice at once returned and has remained well since. A very small papillary growth has since recurred on the anterior commissure.—Dr. SUCKLING read notes of two cases of Dropped Foot from Sciatic Neuritis. The first was a woman aged sixty-six, who had had trouble for six months, attributed to sciatica, and had lately lost the power of raising the toes. The external popliteal nerve was thickened and tender. The plantar reflex was absent on the affected side. The second case was that of a man, aged sixty, who suffered from pain in the course of his sciatic and peroneal nerves. In this case, during paroxysms of pain, all power of dorsal flexion of the foot would be absent. Dr Suckling called attention to the great preponderance of left-sided sciatica over right-sided sciatica and suggested that a loaded rectum might possibly be a predisposing cause of the neuritis. Nearly all cases of sciatica were, in his opinion, in greater or less degree due to neuritis. He also spoke of temporary dropping of the foot after paroxysms of pain in locomotor ataxy and of dropped foot in phthisis.—Mr. JORDAN LLOYD showed a specimen of Annular Carcinoma of the Sigmoid Flexure removed by operation from a woman, sixty-two years of age, suffering from acute symptoms of intestinal obstruction. The lumen of the bowel was contracted to the size of a crow quill, but the patient had not complained of abdominal symptoms until a few days before the operation.—Mr. LLOYD also showed a life-size drawing of a Primary Multinodular Cancer of the Liver removed post mortem from the body of a woman forty-two years of age. The specimen was shown because of the enormous size of the organ, which weighed 15 lb. 12 oz.—Dr. FOXWELL showed a Heart taken from the body of a girl of seventeen, in which there was a communication between the auricles. The opening into the right auricle was some quarter of an inch in diameter; that into the left auricle very little more than one-sixteenth, and situated much higher up in the wall of the septum, so that a valvular passage existed between them, which, it seemed, must be closed, or nearly so, during the auricular systole. The pericardium was almost universally adherent; where it was not, its layers were separated by caseous material; where adherent its layers were largely infiltrated with calcareous matter, which in places was one-eighth of an inch in thickness and was very dense and continuous forming a rigid shell to the heart. The history was one of good health and strength, though always short-winded on exertion, up to the age of fourteen; since then the patient has felt increasing failure of strength with symptoms of bronchitis. No acute rheumatism or scarlet fever.—Mr. TAYLOR showed three specimens of Diseased Kidney removed by Nephrectomy: 1. A large Pyonephrosis removed by the Abdominal Method,

the patient making a good recovery. 2. A Carcinoma of the right Kidney Removed through a Lumbar Incision. Recurrence had taken place within three months. 3. A case of Hydronephrosis operated on successfully through the abdomen.—Mr. BARLING then read a paper on Appendicitis.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.—Dr. T. Oliver presided at this meeting on Dec. 8th. Professor BEDSON demonstrated a ready method for the Detection and Estimation of Free Hydrochloric Acid in the Contents of the Stomach. Jolles' method was based on the fact that a solution of eosin shows two absorption bands in the blue-green portion of the spectrum, which are destroyed by hydrochloric acid intensified by alkalies, but not affected by lactic, butyric, acetic or formic acid.—Mr. MORGAN showed a boy on whom the right common carotid was tied for Uncontrollable Hæmorrhage from the mouth, apparently following extraction of a tooth. The bleeding recurred after ligature, but in a much less severe form and was easily controllable by plugging the bleeding spots.—Dr. MURPHY showed a girl on whom he had sutured the tibia for ununited fracture with a good result.—Dr. HUME showed a man from whom he had removed a large Sarcomatous Kidney by anterior incision. There had been no hæmaturia, and the ureter was found to be blocked. The amount of urine both before and after operation was about normal.—Dr. PAGE showed—(1) a man aged thirty-eight, whose right kidney he had removed for Pyonephrosis. The kidney was unusually high, so that the tumour could not be felt before the abdomen was opened and the removal was more difficult than usual; (2) a boy from the synovial membrane of whose knee-joint a Growth had been dissected; (3) a man aged seventy, who had all the symptoms of Stone in the Kidney. At the operation no stone could be found and all his symptoms had returned.—Dr. PAGE showed a man whose femoral artery he had tied for Popliteal Aneurysm.—Dr. MURPHY showed a similar case in which he had tried compression of the femoral artery but had afterwards to ligature.—Mr. WILLIAMSON also showed a case in which he had ligatured.—Dr. A. E. MORISON showed specimens from three cases of Ectopic Gestation in which he had recently operated, all the patients recovering.—Dr. LIMONT showed a woman suffering from widespread Lichen Planus. On one leg there was a patch of lichen verrucosus.—Dr. HUME showed Calculi removed from three patients by supra-pubic lithotomy, and Dr. SELBY PLUMMER showed one removed in the same way.—Dr. COLEY showed a Syringe which he had used for intra-laryngeal injection of menthol. Cough and dyspnœa had been greatly relieved by the treatment.—Mr. WILLIAMSON showed a Cup of Bone removed from an excised eyeball and two specimens of Glioma of the Retina.—Dr. ROBERTSON showed some of the Modern Instruments used in throat and ear surgery.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—At an ordinary meeting of the Society on Nov. 12th, Mr. R. C. CHICKEN, F.R.C.S., the President, read a paper on Reducible Hernia. The object of the paper was to show that the proper treatment of a recent reducible hernia was by operation and not by truss. That the treatment by truss should be reserved as a means towards radical cure in congenital hernia or as a permanent palliative remedy in the case of the infirm, sick or aged. Under the antiseptic treatment the risk to the patient was almost *nil*—much less than that entailed by wearing a truss. The actual mortality was less. It was strongly urged that the operation should be performed early and before the rings and adjacent parts were displaced, or before the contents of the sac became too large or adherent. At the conclusion of Mr. Chicken's paper a cordial vote of thanks was moved by Messrs. Boobbyer and Anderson respectively, and carried unanimously.——Mr. R. C. Chicken presided at a meeting of the Society on Dec. 12th, when the following communications were received:—Mr. ANDERSON showed a boy aged ten upon whom he had successfully operated for Double Osseous Ankylosis of the Hip. A free and fairly firm joint was secured on both sides. He also showed a man aged forty-five upon whom he had operated for Empyema with Multiple Sinuses with complete success.—Dr. HUNTER exhibited, with Dr. ELDER, the Fœtus and Membranes from a case of Tubal Pregnancy rupturing at the end of the second month, upon which the latter had performed abdominal section. Ten days had elapsed since the operation and the woman was recovering without a bad symptom.—Dr. HANDFORD showed specimens of Multiple Miliary Aneurysms taken from the brain of a man aged sixty, who was first attacked with Right Hemiplegia. The one-sided paralysis after a few hours' duration spread to the other side and the man rapidly succumbed in a state of coma. The vessels at the base of the brain were separated by washing away the brain substance with a stream of water. The aneurysms were from twenty to thirty in number and from one-twenty-fifth to one-tenth of an inch in diameter.—Dr. SYKES-WARD showed a specimen of Acephalous Monster (weighing nine pounds) which he had delivered with some difficulty by turning.—Dr. WILLIAM B. RANSOM showed a Spleen some six inches in diameter, removed from a typhoid fever patient at seventeen who died in the third week. The cystic cavity was filled with bile-like fluid and its walls showed the splenic trabeculæ dissected out.—Mr. ANDERSON exhibited a Uterine Fibroid weighing many pounds which was successfully removed by himself.—Dr. HUNTER then read a paper upon Myxœdema and advocated the injection of thyroid extract. After discussing the usual symptoms and course of the disease, he described several cases in which the treatment had been adopted with complete success. He laid stress upon the necessity of a slow injection of the juice.—Dr. WM. RANSOM recommended the ingestion of raw thyroid tissue. He stated that he had unsuccessfully applied the thyroid treatment to a case of exophthalmic goitre.—Dr. HANDFORD advised the slight cooking of the gland tissue and gave an account of a case of myxœdema recently under his own care, in which every other line of treatment had been tried without benefit.—Mr. WOOD of Ilkeston gave a further history of the same case.—Finally, Mr. ANDERSON read a paper on Tubercular Tendo-vaginitis. In describing tubercle in tendon sheathes, he stated that its behaviour in them was practically the same as in joints. He advocated early operation by scraping and free drainage, with antiseptic precautions.—The PRESIDENT said that the removal of tubercular tissue from surfaces to which it was adherent by scraping had been very generally attended with the best results.

PLYMOUTH MEDICAL SOCIETY.—On Dec. 10th the PRESIDENT (Mr. Leah) brought forward a boy aged eleven, whose legs had been amputated at the "seat of election" for Infantile Paralysis.—Mr. WOOLLCOMBE demonstrated the present condition of the right elbow of a labourer aged thirty-two, whose joint was excised two months previously by Mr. Swain for a Compound Comminuted Fracture; and the left elbow of a blacksmith aged twenty-six, whose joint was removed six months ago by the same operator for Tuberculous Disease commencing in the Olecranon. The former was flail-like, but improving; while the latter could saw and hammer and possessed a remarkable power and range of extension.—Mr. WOOLLCOMBE also showed for Mr. Swain a man aged thirty-five cured by Laparotomy of a Cyst of the lesser Peritoneal Sac, full details of which will be published as an addendum to Mr. Jordan Lloyd's cases.—Mr. FOX exhibited for Mr. Jackson a multipara aged fifty-four with marked Myxœdematous Facies of three years' duration.—Mr. A. C. RENDLE demonstrated a very typical case of Xanthelasma Palpebrarum in a woman of thirty-five, noticed for six or seven years, and accompanied by burning and itching of the lids.—Dr. LUCY showed two microscopic specimens of commencing Epithelioma of the Tongue removed from a man aged sixty-nine exhibiting early "cell-nest" formation.—Mr. R. S. THOMAS brought forward large Multilocular Dermoid of left and Dermoid of right Ovary removed from a nullipara of thirty-eight and Dermoid Cyst of Ovary from a girl aged eleven, with microscopic specimen of cyst wall showing skin, hair and sebum.——At a meeting held in the Society's library on Saturday, Nov. 26th, under the presidency of Dr. Aldridge (Plympton), Mr. WOOLLCOMBE read a paper on the Connexion in Disease between Distant Organs not known to be related in Health. Four examples were chosen as illustrating this connexion—viz.: (1) The inflammation of one or both parotid glands after injury or disease of the abdominal contents, and orchitis, urethritis and nephritis after mumps; (2) the cerebral abscess which accompanies or follows empyema when there has been no abscess of the lung; (3) the relatively much greater frequency of abscesses of the heart and kidneys after pyæmia due to acute necrosis than in pyæmia following amputation; (4) the association of certain forms of arthritis with hepatitis and jaundice. Mr. Woollcombe produced notes of 130 cases illustrating the first of these connexions, and showed that the parotitis might follow injury or disease of almost any part of the generative-urinary or alimentary tracts and that there was no connexion between the side of the abdomen affected and either parotid in particular. In his opinion the injury of branches of

the sympathetic, causing first paralysis and subsequently increased activity of the vaso-dilator fibres and a consequent largely increased blood-supply to the parotid, afforded the only rational explanation. Next 442 cases of pyæmia collected by Paget were analysed and it was shown that abscess of heart and kidneys followed in cases after acute necrosis in 61 per cent., and in cases after amputation in only 1 per cent. Mr. Woollcombe suggested that the explanation lay in the different microbes engaged, and proposed making an attempt to propagate the microbes of pyæmia following amputation on portions of the heart and kidneys of patients in whom during life they had not caused abscesses of those organs. The other subjects were alluded to briefly, and he gave it as his opinion that the cases of arthritis followed by hepatitis and urticaria were examples of rheumatic arthritis complicated by slight pericardial and endocardial changes (unnoticed), and followed by nutmeg liver, which, by upsetting digestion, gave rise to urticaria.—Drs. Aldridge and Fox and Messrs. E. Square, M. Butteel, C. Rendle, A. Rendle and Lucy, and Fleet-Surgeon Ellis, R.N., joined in the subsequent discussion.—Mr. C. RENDLE showed the Left Kidney, Uterus and Annexa removed post-mortem from a woman aged seventy-two, who some twenty years ago was seen by Sir Spencer Wells with an abdominal tumour on which he wished to operate; a year later the "tumour burst," and was discharged per vulvam (not known whether through vagina or urethra.) Only one kidney, that shown, was present, the right kidney, ureter and ureteral opening in bladder being absent. The left kidney was much hypertrophied, and contained in the medulla a red pultaceous fluid.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this Society was held on Dec. 8th, the President, Mr. Simeon Snell, F.R.C.S. Edin., in the chair.—Dr. ARTHUR HALL introduced a woman twenty-three years old with the remains of the hyaloid artery persisting in the left eye. In front of the disc a cloudy funnel, with a short black rod-like body on the inner side of it, extended for some distance into the vitreous. There was also a slight central opacity of the lens.—The President, Dr. Porter and Mr. Pye-Smith made remarks.—Mr. RICHARD FAVELL showed a specimen of Tubal Mole which he had removed by abdominal section. The tumour, which was about the size of a walnut and had a small central cavity, was attached to the lower wall of the right Fallopian tube. No embryo was found, but a microscopic section showed chorionic villi.—Mr. RICHARD FAVELL related a case of Missed Abortion, in which a blood mole, after being retained in the uterus for six months and a half, was expelled about the time when gestation, had it been normal, would have terminated. The patient had no hæmorrhage in the interval.—Mr. RICHARD FAVELL showed a specimen of Fibroma of Ovary which he had removed from a woman sixty-three years of age. The tumour weighed just over three pounds, and had a thin, short pedicle which was tied in one loop. The patient made a good recovery.—Mr. RICHARD FAVELL related for Mr. LAVER particulars of the removal of an Ovarian Cyst for acute axial rotation.—Mr. Coombe, Dr. Hamel and Dr. Keeling joined in the discussion on Mr. Favell's specimens and cases.—Dr. BLACK MILNE communicated a note on the Etiology of Acute Bright's Disease. He related an instance where in one house three healthy children were almost simultaneously attacked. They had not been exposed to wet or cold and careful examination and inquiry as to the possible existence of diphtheria, scarlet fever or other of the exanthemata was made with negative results. A probable source of origin was suggested in the presence of an offensive privy-midden in a small back yard near the kitchen door. In another instance where two children in one house were found suffering from acute nephritis, Dr. Milne failed to discover any cause whatever. Reference was made to a possible microbic origin.—Dr. Burgess, Dr. Porter and Mr. Pye-Smith made remarks.—Dr. MARTIN reported a case of Diarrhœa in Advanced Phthisis in which half-drachm doses of dermatol four times a day effectually stopped the diarrhœa after various astringent remedies had been tried for days without avail.—Mr. ATKIN read a paper on Flat-foot and drew attention to the fact that slight cases often remained undiagnosed, complicating and even causing more easily detectable complaints. The connexion with ingrowing toe-nail and sweating of the feet from pressure on the plantar nerves was adverted to. The want of unanimity of opinion amongst authorities as to the causation and treatment was gone into at length.—Mr. H. J. Knight and Dr. Sinclair White took part in the discussion which followed.——A meeting was held on Thursday, Nov. 24th, Mr. Simeon Snell, President, in the chair.—Mr. PYE-SMITH showed three patients on whom he had recently performed Excision of the Tongue.—The adjourned discussion on Anæsthetics was resumed by Dr. ARTHUR J. HALL, who laid stress on: (1) The methods of preparing the patients; (2) personal idiosyncrasies in taking anæsthetics occurring in families; (3) early signs of danger—e.g., the state of the pupil, pulse or respiration. Dr. MARTIN spoke in favour of chloroform. He dwelt upon the necessity of securing the patients' confidence before beginning to administer the anæsthetic. Too heavy a dose should not be given at the outset. Slowing or irregularity of the pulse often gave an earlier warning of danger than any change in the respiration. Mr. PYE-SMITH thought it important to endeavour to answer such questions as the following: Is one anæsthetic safer than others and of general applicability? If so, which is it? How is it to be administered, and under what circumstances is it to be discarded for some other? He thought nitrous oxide the safest, but not generally applicable. Ether he regarded as safer than chloroform and of very general applicability in this country. He suggested as rules never to give chloroform when ether might be equally well used; never to give chloroform in any case without the patient's urgent wish, and when in doubt as to which to administer to give ether. Mr. Richard Favell, Mr. Charles Atkin, Dr. Rhodes, Dr. Anthony McCall, Dr. Littlejohn, Mr. Wightman, Mr. Dale James and the President joined in the discussion. Dr. Porter and Dr. Cleaver replied.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—At a meeting of the North-Western Branch of this Society Mr. VACHER intimated that the parent society had resolved that the memorandum of the members of the branch on the Prevention of Phthisis should be considered at one of the parent society's meetings.—Dr. ROBERTSON then read an elaborate paper on Compulsory Isolation of Certain Diseases. He said that the mortality statistics of Great Britain as well as abroad showed that an enormous number of persons died every year from preventable diseases, whilst much of the sickness and permanent damage to health escaped observation and record. Isolation was the only available means by which infectious disease might be checked. Reasonable isolation precautions could not at present be enforced and there was a necessity for the existence of compulsory powers in certain cases. He regarded scarlet fever as the type of a most important sub-group which required isolation for every case. With regard to this disease a clause in the Public Health Act of 1875 gave the medical officer of health power to enforce isolation under certain conditions, but the weakness of the clause was so great that but little use had been made of it. By isolation he did not mean compulsory removal to hospital if proper precautions could be taken at home.—In the discussion that ensued Mr. SERGEANT, medical officer of health for the county of Lancashire, said he thought it would be injudicious at the present time to ask for additional powers of compulsion, and indeed for this purpose hospital accommodation was as yet very inadequate. Other members who spoke were of opinion, on the other hand, that as far as hospital provision was available, sufficient powers of isolation already existed.

CERTIFYING SURGEONS' ASSOCIATION.—A meeting of the general committee of this Association was held at Manchester on Tuesday last, Mr. Hughes (Ashton) presiding, when there was a large attendance. The first annual reports—obliged to be furnished to the Home Office under the new rule—dating from Jan. 18th to Nov. 1st and giving the number of children examined and rejected, with the cause of rejection in each case, were dealt with, copies of their reports having been furnished by members of the Association to the hon. secretary Dr. Holmes. The rejections in several large districts—chiefly in Lancashire—ranged from 3 to 4 per cent. Taking the returns as a whole, however, the chairman expressed the opinion that there appeared to be some laxity in the certifying in some districts from which returns of rejections had been received, which were meagre in comparison with others. After some discussion it was resolved to urge the importance of the subject on surgeons in these districts. It was also decided to resume the issue of quarterly reports, giving the number and causes of rejection. The general feeling was that the retention of the surgeons had led to greater care being taken in the employment of children in a physically weak state, the number of such children presented for examination being thereby sensibly lessened. The Association was stated to be making good progress.

Reviews and Notices of Books.

A Treatise on Gynæcology, Clinical and Operative. By S. POZZI, M.D., Professor in the Faculty of Medicine (Paris), Surgeon to the Lourcine-Pascal Hospital. Vol. I. The New Sydenham Society. London. 1892.

THIS translation of Professor Pozzi's work, issued by the New Sydenham Society, has the advantage of having been made from the proof-sheets of a new edition supplied to the Society by the publishers as they were ready. The handy size of the book contrasts favourably with that of the first volume of the American edition. The subjects dealt with in this volume are "Antisepsis in Gynæcology," "Anæsthesia in Gynæcology," "Methods of Producing Union and Arresting Hæmorrhage," "Metritis," and "Fibromata"—their medical and surgical treatment. Antisepsis is dealt with in great detail, both as it affects operations to be performed per vaginam, and abdominal operations. In both the extreme importance of rendering the hands and nails aseptic is very rightly insisted on and minute directions for the purpose are given. As regards the nails, we should, however, consider the plan of keeping them short and thoroughly brushing them with soap and water preferable to cleaning them with a pointed nail file, as here advised. Dr. Pozzi lays stress on the difficulty of disinfecting the vagina by injections. To be effectual, while the vaginal pipe is manipulated with one hand, two fingers of the other must be used so as to stretch out the folds at every part of the passage, and one finger should be passed as far as possible into the os uteri. Even then disinfection is only temporary, as germs descend from the supra-vaginal cervix. To obviate the infection from this source, we are told, requires three such injections at intervals of an hour, each consisting of a litre of 1 in 3000 sublimate solution. The author naturally draws the inference "that the uterine sound should never be passed, nor should a dilator be introduced into the uterine cavity without having previously disinfected the vagina and cervix by three injections." We are inclined to think that the passage of the sound in this country has rarely been preceded by so rigorous a disinfection, but we entirely agree with Dr. Pozzi as to the reality of the danger. Fortunately the number of cases where the use of the sound is absolutely necessary for diagnosis is a relatively small one, and there is no reason why the precautions mentioned should not be observed. It is not too much to say that the habitual use of the sound as part of an ordinary examination may be taken to indicate a want of familiarity with the bimanual method of examination. We are glad to observe that the use of Hegar's dilators is condemned "unless the cervix is already soft and dilatable." Much more space than usual is devoted to "metritis," which is evidently regarded as not unfrequently separable clinically from perimetritis, and as often being *the* condition causing the patient's symptoms, and consequently the one to which treatment must be directed. We are told later on, however, that salpingitis coexists most frequently with metritis, and that the diagnosis must only be metritis if the appendages seem healthy when a careful examination is made under anæsthesia. There is an excellent account of the relation of micro-organisms to metritis and particularly to puerperal metritis. Winter's researches are quoted, according to which pathogenic organisms are normally present in the vagina and cervix in half the cases, but fortunately they have for the time lost their virulence. It is argued, however, that under favourable conditions—for instance, in presence of organic débris—they may resume their activity for evil. Therefore, as regards puerperal infection, while, as here stated, no doubt the infection from without—"heterogenetic" infection—is the rule, the possibility of "autogenetic infection," arising from pathogenic germs so often present normally in the cervix and vagina, must be remembered. These observations, at all events, would explain the two fundamental rules recognised by all obstetric authorities: the importance, first, of absolute asepsis as regards the accoucheur's hands, instruments &c., and secondly, of leaving nothing in utero—pieces of placenta, membranes or clots—that can undergo decomposition.

The author adopts a studiously moderate attitude towards disputed points—for example, in regard to the use of the electrical treatment for fibroid tumours, he says: "Even an opinion can scarcely be formed, so contradictory is the evidence." It is interesting, however, to see from a discussion of this question at the Surgical Society of Paris that "it seems that the value of this therapeutic agent has been overstated from the point of view of the diminution of the tumours in size"—a conclusion in accordance with the views of most English authorities. There is a very complete account of abdominal hysterectomy for fibroids and of the various modifications of the operation; and also a comprehensive review of the most recent statistics of those operators who have had the most experience in this direction. From this it appears that, notwithstanding great experience and the greatest operative dexterity, whether the pedicle be treated according to the intra-peritoneal or the extra-peritoneal method, the mortality of hysterectomy for fibroids still remains high, especially when we remember that the natural mortality of fibroid tumours is insignificant. We are glad to know that the remaining portion of the work is well advanced in preparation and may be expected shortly.

Papyros Ebers. Das älteste Buch über Heilkunde. Aus dem Aegyptischen zum erstenmal vollständig übersetzt. Von Dr. Med. H. JOACHIM, Pract. Artzt in Berlin. (Papyrus Ebers, the Oldest Book on the Healing Art. Translated, for the first time in full, from the Egyptian by Dr. H. Joachim.) Druck und Verlag von Georg Reimer. Berlin. 1890

YEAR by year achæological research finds its most precious treasure-trove in the great Nile Valley, the home, or more truly the hive, of primeval civilisation. To that region every art, every science, traces its first beginnings, and medicine in particular acknowledges no earlier source. From the scanty and by no means precise indications of Greek and Roman writers we had long known the priority of Egypt in the science of disease and its remedies. These indications were from time to time confirmed and supplemented by representations of medical appliances and surgical instruments on obelisks, in temples and on tombs, and these again were still further enriched or illustrated by the discovery of manuscripts dealing directly or remotely with the healing art. But the most important because the most systematic and authoritative testimony to Egypt's priority in medicine is that yielded by the Papyrus Ebers, so called from the brilliant Orientalist and romancist who was fortunate enough in the winter of 1872–73 to obtain the priceless document from a citizen of Luxor, a village representing the ancient Thebes.

Other papyri bearing on Egyptian medicine were not unknown to the learned world. There was the larger and the lesser "papyrus Brugsch" in the Berlin Museum dating from the fourteenth century (B.C.)—even yet untranslated though ably summarised by the editor after whom it is named. There was the papyrus of the British Museum, attributed to the time of the eighteenth dynasty—not yet edited even, and known to us only from a short notice of it by Mr. Samuel Birch. There were other papyri, dealing half with magic, half with medicine, in the museums of Leyden, Turin, Boulaq and Paris. But none of these can for a moment compare with the Papyrus Ebers now in the library of Leipsic University for antiquity, for wealth of subject-matter, pharmaceutical and pathological, for compendiousness and freedom from clerical inaccuracies.

Around this document quite a literature has already gathered, but till the other day our best knowledge of it was that communicated by its discoverer and editor, Georg Ebers. He had fixed its date as that of "the middle of the sixteenth century before Christ." He had identified it with the book περὶ φαρμάκων mentioned by Clemens Alexandrinus, a father of the Church, who lived under the Emperors Severus and Caracalla (193–217 A.D.), according to whom it must have been the pharmaceutical part of a medical encyclopædia consisting of five other parts. He had shown that it was no original production, but indeed a transcript from an earlier work. On all these points additional light has lately been thrown, by none more effectively than by its translator into German, Dr. Joachim, who, summing up the results of his review of Ebers' conclusions, formulates his opinion as follows: "In the Papyrus Ebers we have a kind of medical compendium or collective treatise, committed to writing, at latest about the year 1550 before Christ, but belonging, in its several constituent parts, to periods of time more or less anterior to that date."

It is not, therefore, the treatise on materia medica merely which such able writers as Dr. Berendes in the "Pharmacie bei den alten Culturvölkern" would have us believe, nor is its interest confined to the preparation and exhibition of medicaments, as a recent commentator on the "Archéologie Médicale de l'Égypte et de la Judée" would seem to imply. Were such its chief aim and exclusive subject-matter we should expect to find it dealing with remedial agents from the purely pharmaceutical standpoint, their special virtues, their actual effects, their injurious sequelæ and such like. As Dr. Joachim observes it makes mention primarily of the ailments of special organs, particularly of the stomach and the eyes, of diseases of women and of the structure of the body; and secondarily, though in minute detail, of therapeutic appliances. Under the former aspect its reference to pathological states has peculiar interest for the medical historian who seeks to connect ancient "types of disease" with their modern equivalents—an inquiry which often results in the conclusion that the malady known to the ancients under a particular name by no means corresponds in essential features with the malady to which in modern times the same title has been given. In this connexion the reader will find Dr. Joachim's excursus on the "Chlorosis Ægyptiaca" most instructive and suggestive, concluding as he does that, under the obscure malady so designated, we must understand a disease due to the parasitic worm which in Egypt haunted the duodenum—ankylostomum duodenale—the pathological expression of which was that hæmatic disorder known as chlorosis—in this case the "Chlorosis Ægyptiaca."

We might follow Dr. Joachim throughout his most careful and clever introduction and give further evidence of the scientific knowledge he has brought to bear on his version of the Papyrus Ebers—knowledge which places him at a distinct advantage over its able and keen-witted discoverer; but our space will admit of only a brief reference to his work and the claims it has on the profession. It was undertaken in behoof of the busy practitioner who cherishes a natural curiosity to know the first simple rudiments of his time-honoured craft. Himself a practising physician, he yet had the mental pluck to dedicate all his spare time to mastering the Egyptian language—a task which, to "the languid students of the present day," as Hallam describes them, would of itself seem sufficient life-work. After unwearied application he made himself master of the original of the papyrus and proceeded to give its meaning, word for word, in his native German. Difficulties, neither few nor small, continually beset his progress, but these he has either surmounted or left indicated for subsequent solution by the readers whom he fondly hopes he may induce to follow in his footsteps. With regard to his execution of the translation, we have the testimony of perhaps the greatest of living Egyptologists as to its sterling merits—the testimony of Professor Lieblein of Christiania. This attestation is all the more significant, as besides his unique knowledge of the Egyptian language and Egyptian archæology Professor Lieblein had himself been long engaged on the Papyrus Ebers, and has strengthened Dr. Joachim *mit Rath und That* (with word and deed) on all critical occasions. The introduction, of which we have already spoken, furnishes the reader with every needed *Orientirung* (initiation) before entering on the study of the book itself, and a painstaking index completes the value of the whole. We can only echo Dr. Joachim's wish that his translation of this ancient manual of the healing art will be appreciated at its true value and stimulate an ever-increasing contingent of the profession to study that strangely neglected though most fascinating department of history—the rise and evolution of medicine.

The Operations of Surgery. Intended especially for the use of those recently appointed on a Hospital Staff and for those preparing for the Higher Examinations. By W. H. A. JACOBSON, M.A., M.B., M.Ch. Oxon., F.R.C.S. Second Edition, with 235 Illustrations. London: J. & A. Churchill.

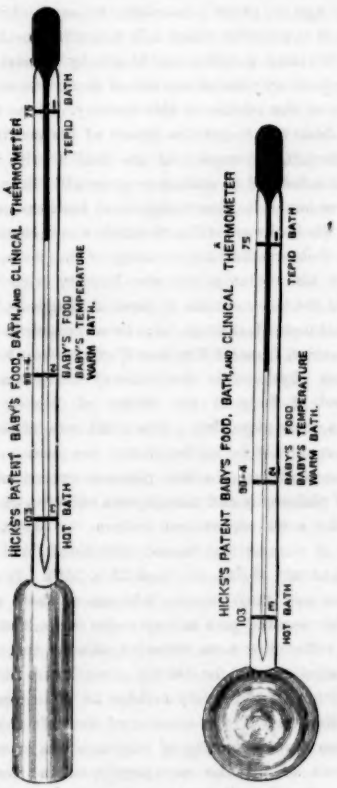
WE regret that through an oversight we have not yet noticed this the second edition of a most excellent manual. The first edition was speedily exhausted and another demanded. The plan of the book remains unaltered. There are, however, certain improvements—for instance, "the chapters on the results of Otitis Media, Brain Surgery, Extirpation of the Larynx, Inguinal Colotomy, Nephrolithotomy and Cholecystotomy have been largely rewritten; while the additions include sections on Anæsthetics, Antiseptics, Diagnosis of Renal Calculus and the conditions which simulate it, Calculus in the Ureter, Intestinal Anastomosis, Typhlitis and Appendicitis, Rupture of the Intestine, Pancreatic Cysts, Tubercular Disease of the Bladder, Prostatectomy, Erasion of the Knee and many minor ones." As we stated in our review of the first edition of the work it aims at being much more than a mere dry exposition of the various operations which are performed on the human body for the cure or relief of disease or deformity &c., and gives the indications for the performance of the operation described, shows the dangers to be feared from the operation, the results both immediate and remote to be expected and the after treatment required. The present edition is larger than its predecessor, has two to three lines to each page more than the first edition and contains more illustrations of the same useful character. The handbook is one certainly to be recommended.

New Inventions.

A NEW THERMOMETER.

WE have received from Mr. James Hicks of Hatton Garden, manufacturer of scientific registering instruments, a new form of thermometer suitable for use in the nursery. It is provided with a mercury bulb in the usual way and a graduated tube. At the other extremity the glass is widened out into an air chamber, one form of which is cylindrical and the other spherical. These chambers serve as floats to the instrument when taking the temperature of the bath. Among the various uses for which these thermometers are adapted is the securing of uniformity of temperature of the food of young children and the testing and regulating the heat of the child's bath. They can also be used in taking the temperature of the skin in the axilla or in mucous cavities, and will thus serve in a rough-and-ready way as a premonitory warning in cases of febrile disease. The

graduated tube contains but three marks—viz., one at 75°, which marks the temperature for a tepid bath; the second at 98·4°, the temperature of a child's body and the temperature to which water should be raised when a warm bath is required; the third at 103°, which marks the temperature of the water when a hot bath is required. This easy system



of marking cannot but be very useful to nurses. We have tested these thermometers against registered instruments, and find Hicks's patent to correspond with the readings of those registered instruments in all cases. These instruments are useful in every household, and their cheapness renders them easily accessible.

A NEW EAR SYRINGE.

MESSRS. C. WRIGHT AND CO. of New Bond-street, have submitted to us an ear syringe for the use of patients and nurses. It is not always an easy matter to provide a syringe

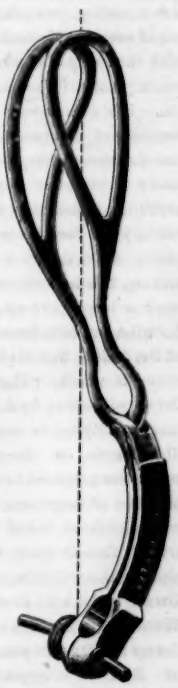
which will be used effectually by unskilled persons, and at the same time it is, in certain inflammatory diseases of the ear attended with profuse discharge, most necessary that the ear should be completely cleansed several times in the course of the day. This syringe ensures two requirements:—1st. The stream of water or other fluid passes along the roof of the canal and so the ear is thoroughly cleansed. 2nd. No injury can be done to the ear, as the nozzle is so constructed that it cannot be inserted too far. The ingenious arrangement which secures this also forms a passage for the returning stream of fluid.

A NEW BANDAGE ROLLER.

MR. JAMES BELLAERS of Regent-street, Leicester, has submitted to us a new bandage roller, which is so constructed that it can be instantly adjusted to any width of bandage. The machine being made of metal is easily kept clean and is a distinct improvement upon many of the old bandage rollers. It is portable, light and strong, qualities which render it useful for first-aid work and nursing classes. It can be readily and securely fixed on any table.

AN IMPROVED ASEPTIC AXIS-TRACTION FORCEPS.

MESSRS. WALTERS AND CO. of Moorgate-street, E.C., have manufactured for me a new axis-traction midwifery forceps which is at once efficient, simple and cleanly. The instrument is made entirely of steel (plated) and the surface is perfectly smooth throughout, affording no nidus for the lodgment of disease germs, while the whole instrument can be plunged in boiling water or otherwise purified. The blades are of the usual shape. A Barnes' foramen is placed at the lock for use if necessary when the head is at the outlet. Beyond the lock there is a perineal curve, exactly counteracting the pelvic curve of the blades. Longitudinal handles are abandoned. At the extremity of the perineal curve (where it meets the axial line) there is a movable transverse traction rod and a second foramen (between the parts of the forceps) to receive the middle finger, thus forming a very comfortable hold for the operator. The traction rod also secures the two halves of the forceps when in position, being provided with two lateral rings, one fixed and one movable (the latter running freely by screw action), so as to embrace the extremity of the forceps. The forceps is about an inch longer than Sir J. Simpson's. This forceps, while as efficient as the usual axis-traction forceps, is less complicated and less likely to retain septic material. The fault of forceps with a perineal curve (without added tractors) has generally been that they have been provided with longitudinal (wooden) handles, ignoring the fact that traction can only be efficiently applied at one point—viz., where the perineal curve meets the axial line. To sum up, I claim for the forceps that it is (1) efficient, (2) aseptic, (3) simple in its mechanism and (4) comfortable for the operator.



Winchester. G. TAYLOR, M.B.

MEDICAL MAGISTRATES.—Dr. Robert McPherson of Stalybridge, Mr. Henry R. Leech, L.R.C.P., L.R.C.S.Edin., of Birmingham, and Dr. Joseph Thornley of Bolton, have been added to the Commission of the Peace for the boroughs of Stalybridge, Birmingham and Bolton respectively.

THE LANCET.

LONDON: SATURDAY, DECEMBER 24, 1892.

WITHIN a very few days two remarkable men have died—Dr. WALTER HAYLE WALSHE and Sir RICHARD OWEN. In our obituary column of this week we have sketched the principal features and events in the long and fruitful life of Sir RICHARD OWEN, which is full of suggestion and stimulus to those who consider it. Next week we hope to notice in some detail the life and work of Dr. WALSHE. Both of them illustrate the longevity of scientific men. Indeed, both of them had outlived most of their contemporaries, though happily neither of them had outlived his fame. It is gratifying to think not only that both of these great men were members of the medical profession, but that to both of them this profession was the stimulus of their genius and the basis of their enduring work. It is difficult to go back to the time when RICHARD OWEN was a medical practitioner. His name had for years dropped out of even the Medical Register. But for all that his life began with the study of anatomy and medicine in Edinburgh and he was in practice for some time in the neighbourhood of Lincoln's-inn. His genius was recognised by ABERNETHY and other members of the profession, and in the Hunterian Museum of the College of Surgeons he found the first scene and opportunity of his most useful and laborious work. Though his attitude towards the greatest anatomical conceptions of the century has been somewhat conservative; though his recognition of the doctrine of evolution has been, to say the least halting, it is impossible not to see even in his own anatomical work a large part of the foundations on which that great doctrine has been based. We can well imagine the intensity of the feeling that DARWIN confessed to Sir CHARLES LYELL when he wrote—"How curious I shall be to know what line OWEN will take: dead against us, I fear." Nevertheless it is most gratifying to read further that "he wrote me a most liberal note on the reception of my book, and said he was quite prepared to consider fairly and without prejudice my line of argument." DARWIN considered that OWEN had suggested belief in the unity of Origin of Birds, and OWEN himself made claims to having discovered the principle of Natural Selection, though DARWIN said that whether OWEN or he were first, both of them were preceded by Dr. WELLS and Mr. MATTHEW. No one can be surprised that OWEN at fifty-five years of age, as he was when the "Origin of Species" appeared, should think conservatively. What is more curious than divergence of opinion on great and novel doctrines and generalisations is the opposition of giants in science on questions of fact as in the famous scene in the British Association at Oxford when OWEN, having asserted that the brain of the gorilla presented more differences as compared with the brain of man than it did when compared with the brains of the very lowest and most problematical of the quadrumana, was answered by Mr. HUXLEY with a direct and unqualified contradiction. All these details will now be forgotten and the world will think only of OWEN'S prodigious labours and his unsurpassed knowledge in comparative anatomy, of his genial nature and general accomplishments, of his distinguished appearance, of his enormous public services in the promotion of public health and of the successful importunity which he brought to bear on rigid economists until they yielded and gave the nation a museum of Natural History somewhat proportionate to its own wealth in money and in great anatomists, to say nothing of the greatness of the subject which it is meant to illustrate.

Of Dr. WALSHE, pending our biography of next week, we need only here say that he was one of the most accomplished physicians of the middle of this century. None that have ever met him will forget the charm of his courtesy as an Irish gentleman, and none that are familiar with the literature of medicine and its modern progress will fail to recognise that he was one of its most enlightened teachers and practitioners. His books are still authoritative and classical. His precision of observation, his accuracy of diagnosis, the carefulness of his anatomy, and the lucidity with which he expounded the new methods of physical diagnosis, which he had studied under LAENNEC, have been recognised by all his contemporaries, from Sir THOMAS WATSON downwards. He was a true physician in the sense of being a student of nature and of facts in the matter of disease. But he was not a mere physician. His mind was of that liberal type that could not be holden of any one pursuit; and, like other great physicians, he took pleasant excursions into the regions of philosophy and metaphysics and even of theology. One of the most recent—we believe the most recent—instances of such excursions and their results will be found in THE LANCET of Jan. 5th and 12th, 1884. It has sometimes been said that the very boldness of these excursions stood in his way and gave an impression of want of reverence for more ordinary or more orthodox views. And, in fact, it must be admitted that he did not so much care for "views" as for truth. In these very articles he estimates that the definite discovery of the relation of the left third frontal convolution to the faculty of language was worth all the speculations of all the metaphysicians in the previous centuries. But for all this, there was no want of reverence in him. And it is only to be regretted that for so many years before his death the world saw and heard so little of one who observed it so much, and who did so much to raise the standard of professional knowledge and method.

THE experience of the past autumn, whilst affording proof of the indebtedness of the country to the vigilance and labours of the health officers of a number of our principal ports, revealed also certain sources of weakness in our port sanitary administration, and it at the same time led to a variety of demands which may be regarded as going beyond the necessities of the case. Hence it was a happy idea on the part of the Lord Mayor to invite the health officers of our ports to a conference where real needs could be emphasised and where discussion might dispose of certain demands that were unreasonable and impracticable. Amongst the latter the question of quarantine was very summarily disposed of. Dr. DAVIES of Bristol moved that the detention of vessels having no sickness on board merely because they came from infected ports was unjustifiable. This resolution was supported by Dr. MASON of Hull,

by Dr. ARMSTRONG of Newcastle and by others, and was unanimously adopted. From the public health point of view quarantine against cholera in British ports has, we trust, now received its *coup de grâce*. Other subjects discussed were of a different character. One proposal was that the Local Government Board should issue a list of infected ports; but no definition of an infected port appears to have been suggested. Herein lies the great difficulty. Is Hamburg now an infected port? The answer is both Yes and No. But which answer is to be acted on? Dr. COLLINGRIDGE, as chairman, urged that the Government could not undertake any such task, and he moved an amendment which led to the abandonment of the original proposal. But we fear the alternative of forming a committee to publish a list of such ports will not prove to be practicable, and we are convinced that if attempted it will be found to involve very great difficulties and inconsistencies. One of the greatest difficulties is indicated in the recommendation which was resolved on, to the effect that port medical officers should be armed with compulsory powers to detain vessels arriving from infected ports until released by formal certificate. England and the majority of the European Powers have recently decided that disease on board, and not the port from which a vessel sails, is to be regarded as the criterion for purposes of health. And this is the only sound method of action. How, for example, will the Southampton health officer deal with vessels arriving from Bombay? He must detain them because "all ships from infected or suspected ports should be treated as infected until found otherwise," and because Bombay port is well-nigh always infected; and yet the much-abused Egyptian Government will regard these very vessels as healthy and admit them to the free passage of the Suez Canal because no disease exists on board. We fear that, as regards some such points as these, solitary ports at home and a few European ports near at hand have alone been held in view, and we cannot but think that when the full scope of some of the proposals made comes to be appreciated several of the conclusions arrived at will not be found practicable. Bitter complaints have been made by those interested in British shipping this year because English ports have been branded as infected abroad by reason of the occurrence—indeed, the importation—of one or two cases of cholera. What will it be next year if the port sanitary authority of London or other body issues an English list of "infected ports" in Europe?

On some points excellent suggestions and proposals were made by various speakers. Thus, when it is decided that medical inspection of certain vessels is necessary, it is intolerable that the vessel should continue its journey with the inspecting health officer on board, and thus carry him many miles up a river estuary—perhaps, indeed, right into dock. The proposal that some detention should, under proper limitations, be enforced, and that proper stations should be appointed where such work has to be done, must be regarded as a proper one. The truth is that our actual experience as to what is really necessary in order to carry out our system of medical inspection has until recently been extremely limited, and we must look mainly to experienced port health officers for advice as to what is needed in order that the system may become effectual without the imposition of needless and impracticable restrictions. From this point of view the Conference has done excellent service. It was, of course, only a consultative body; it could only advise, and it is intended that the port authorities shall themselves soon meet and put forward such conclusions as, after mature deliberation, they may deem necessary for the proper performance of their duties. One question is sure to give rise to much discussion both on their part and on the part of the Imperial Government—namely, that the cost of carrying out the cholera precautions should be borne by the Imperial Exchequer. How far this is to apply to inland authorities as well as port ones does not as yet transpire, but it must be remembered that their duties may also become onerous and costly and that they are likely to follow suit in making a similar demand.

WE dwelt recently upon the general meteorological features of the resorts most in favour as winter quarters. In the present article we will give a similar slight sketch of the subject from the point of view of therapeutics. In many cases the selection of a winter residence is a simple matter. Thus, where mere debility, anæmia, or proneness to bronchial catarrh is the motive for avoiding the British winter, the patient will probably benefit by repairing to any of the very numerous resorts where the average of sunshine, warmth and fine weather in winter is decidedly above what may be fairly expected at home. Such cases do very well on the Riviera, or at Pau or Biarritz, or at Algiers or Egypt. With regard to such patients the line cannot be drawn with any strictness, and the usual rules regarding humidity, equability of temperature &c. have no precise application. Generally, debilitated and anæmic patients require moderate stimulation; hence the decidedly sedative resorts had better be avoided. More care and discrimination will be required in advising patients who have made but an imperfect convalescence from some acute illness—such as typhoid fever, pneumonia or pleurisy, or from a surgical operation. The practitioner must, in such instances, decide whether the amount of constitutional vigour present, the degree of integrity of the digestive functions, the amount of fever (if any) point to the case requiring moderate or decided stimulation or whether soothing meteorological conditions are indicated. If pneumonia or pleurisy has become decidedly chronic and the chance of an acute recrudescence seems remote, few resorts afford such good resultsas the Alpine or other mountain sanatoria. Where a surgical operation has left some local mischief or constitutional dyscrasia behind, sea air is usually best, either (preferably) in the form of a sea voyage or at one of the moderately bracing marine resorts, such as Margate, Biarritz or San Remo. In the case of impaired convalescence after typhoid fever it would be well to remember that very bracing conditions may tend to light up the fever again, that a long and wearisome journey is very undesirable, and that resorts such as Madeira, where diarrhœa is very common, should be avoided.

Our next group—viz., rheumatic and renal cases—is easily disposed of. Warmth and dryness are here indicated, and the elevated sanatoria are inapplicable. Our choice will probably lie between the Riviera, Malaga, Morocco, Algeria and Egypt, and these resorts all present considerable advantages for the patients in question. If the Riviera be chosen probably Mentone or San Remo

presents the greatest advantages in these cases; if Algeria be selected the patient should spend as much of his time as possible inland rather than on the coast; and if Egypt be the choice, the region of the Delta should be avoided. Many resorts are vaunted as at once dry, warm and equable. If such really existed they would be a veritable paradise for the sufferer from chronic rheumatism or chronic nephritis. Unfortunately, such a combination is a meteorological impossibility. Wherever we find a high degree of warmth with a high degree of dryness, there by necessity we also find great differences between sun and shade temperatures and between diurnal and nocturnal temperatures. This is a point regarding which it behoves us to warn our patients. The chief means of avoiding the dangers of a warm and dry climate are the use at all times of woollen clothing, and the avoidance of exposure at and immediately after sunset. As we have hinted, rheumatic or renal cases should never be sent to the high altitudes.

The neurotic patient is always troublesome to deal with, and to suggest suitable winter quarters for him is not very easy. It is satisfactory, however, to reflect that nervous invalids often benefit by travel *quâ* travel. "Anywhere, anywhere, out of the world," says the poor victim in HOOD'S touching poem. "Anywhere, anywhere away from home" is the feeling expressed or implied in hosts of nervous cases. However, even in such instances it will not do to act at haphazard, and some approximate rules will be found helpful. Thus, neurotic cases do very badly in the mountains, the keen air being apparently too exciting for them. They do badly also at some resorts, such as Cannes or Nice, where there are too much glitter and glare, and where the exposure to the sea is too direct. On the whole, neurotic cases had better avoid both the mountains and the exposed marine resorts, and fall back upon the sedative or moderately bracing resorts, such as Pau, Arcachon, Montreux, Grasse, Pisa or Rome. Neurotic cases, especially if these be hypochondriac, do badly on shipboard, the "sad sea waves," the monotony of life and the deprivation of many social enjoyments and customary occupations tending to aggravate their melancholy.

The last class of patients wintering abroad—viz., pulmonary cases—will require rather fuller consideration. We have already said that chronic pleurisy and unresolved pneumonia, if all acute symptoms have definitely subsided, often do surprisingly well at the elevated mountain resorts—Davos, the Engadine, the Dolomites, Colorado &c. Bronchitis, either subacute or chronic, is greatly under climatic influence, and immense benefit may accrue from a well-planned winter abroad. A warm, moist and equable climate, such as that of Madeira, does best where there is much hacking cough without excessive secretion. Where bronchorrhœa exists a drier climate, such as that of Mentone or San Remo, will be found more applicable. The high altitudes are usually out of court in all forms of bronchitis, but more especially if any emphysema be present. The case of phthisis is peculiar and difficult. No known climate prevents the development of tubercle in the lung, but yet every authority admits the great benefit often resulting in this disease from climatic change. The subject is too vast and too abstruse to be more than glanced at in a leading article. Several principles are clear. Cases of chronic phthisis, without much fever, rapid wasting, or large and progressive destruction of lung tissue, are alone applicable for climatic treatment. Early quiescent disease limited to one apex, and without much constitutional disturbance, constitutes the special case where signal advantage often accrues from well-directed climatic change. In such cases the relative merits of the sea voyage, the elevated sanatoria, the Riviera, Madeira, Algeria and Egypt must be carefully weighed, but no detailed or precise rules can be formulated. The high altitudes are contraindicated by the presence of any weakness of the circulatory apparatus, by emphysema, rheumatism or renal mischief, and by nervous irritability. There are few definite contraindications to the sea voyage except melancholia, an invincible dread of the sea and extreme proclivity to sea-sickness. The fact that the patient has had hæmoptysis, though often regarded as very important, really affords no sure help in determining the question before us. Proneness to diarrhœa or intestinal mischief would contraindicate Madeira.

Change of climate may often be sought as a means of palliation in advanced and hopeless cases of phthisis. In such instances mild, sunny and sheltered resorts will be found most advantageous.

THE discussion of what are called "hospital manners" has recently occupied the attention of more than one of our contemporaries. The phrase, according to one of these, describes the "specially rude and flippant attitude which the house surgeons, house physicians and other subordinate officials of our great hospitals are often charged with exhibiting to poor humanity which is forced to seek the aid of those great and noble institutions." It is proverbially easy to bring general and sweeping charges against any large body of men engaged in arduous, beneficent, and often, we regret to say, thankless work. That a house physician or house surgeon may occasionally be guilty of inconsiderate, or what seems to be inconsiderate, behaviour towards some of those who come under his care is possible; but that any isolated instance of such behaviour should be made the ground of a general attack on a large body of hard-working, conscientious, and, as a rule, extraordinarily patient men, is not only ungenerous but unjust. A good deal is said and written about young men "just qualified" and "puffed up with an undue sense of their own importance," and this is not stated as any mitigation of their offence. It is certainly news to us that a house physician or house surgeon, holding any of those posts which are coveted by the best of the younger men who enter our profession, is habitually in the frame of mind which such a description implies. The very fact that he has been selected for his responsible position is an indication that he has shown not only an unusual ability in dealing with disease, but also that, in the opinion of those who are brought daily in contact with him as teachers, he possesses other qualities marking him out as the most suitable man for the duties to which he aspires—duties which consist not only of medical treatment, but which also evoke and demand the power of dealing justly and considerately with suffering humanity and anxious friends and relatives. That the choice is justified in the vast majority of cases we have no doubt; that an occasional instance of inconsiderate treatment—we do not believe of patients, but of their friends—can occasionally be brought forward we cannot

regard as an indictment of the whole class. Besides, as a matter of fact, the house surgeons and house physicians at our large hospitals are often men who have held their medical qualification for some months or even years, and who have employed the interval in study and the acquisition of experience in some continental medical school or in attendance at various English hospitals; and even if they do occasionally suffer under the "grievous" disadvantage of being young men, it is a disadvantage which every day is remedying. It seems to be assumed that a young man, as soon as he receives his hospital appointment "throws his good breeding to the winds and addresses the poor mortals whose suffering he is paid to attend to and relieve, as if they belonged to an entirely inferior group of the quadruped class." The writer from whom we have quoted has certainly been unfortunate in his acquaintances among the class he is abusing. We venture to think that our experience and knowledge of that class are much more extensive and certainly more intimate than his, and although occasionally we may have met a house surgeon or house physician who does no credit to the traditions of his order, such instances are very uncommon. The sneer also with regard to the payment is singularly out of place. The well-paid house physician or house surgeon we have not had the privilege of meeting as yet. He may possibly be looming in the distance, but many of the class whom we have been fortunate enough to know at our large hospitals have not only given up their time and energy to the duties of their posts, but have actually had to pay no inconsiderable sum for that privilege—a sum so considerable as to place entirely out of the reach of many the possibility of enjoying the experience which the duties imply. This of course is a point which we do not wish to emphasise, and it would certainly be no excuse if the charges implied were found to be well grounded. Our contention is that they are not, and that rudeness and incivility are as rare among house surgeons as they are amongst the general body of medical practitioners; and we would further venture to ask whether the general public show to the junior staff at hospitals the consideration which is naturally their due? We do not excuse incivility or rudeness, far less inconsiderateness, to patients on the part of a hospital resident any more than we excuse the same behaviour in his practising colleague. In both such conduct is reprehensible and to be deplored, and in both we think it is exceptional. But the discussion, however unfortunate in tone and temper, and however great the ignorance of facts displayed may be, should serve to put house physicians and house surgeons more on their guard to carry out even more carefully those virtues of Christian charity to the practice of which they have dedicated their lives.

A NEW PROFESSORSHIP IN JEFFERSON MEDICAL COLLEGE.—At a meeting of the Board of Trustees held on Wednesday, Nov. 30th, Dr. G. E. de Schweinitz was, on the unanimous recommendation of the Faculty, elected Clinical Professor of Ophthalmology in the Jefferson Medical College. At the time of his election Dr. de Schweinitz was Professor of Ophthalmology in the Philadelphia Polyclinic and Lecturer on Medical Ophthalmoscopy in the University of Pennsylvania.

Annotations.

"Ne quid nimis."

PROFESSOR MOLESCHOTT.

WE give elsewhere an extended report of the honours conferred in the University of Rome on its septuagenarian Professor of the Institutes of Medicine. A notable man, even had he never travelled beyond his native Netherlands, Moleschott has made himself yet more notable by his singularly varied, not to say adventurous, career. He began scientific life, as we have already indicated, under the auspices of Gerard John Mulder, and the methods and the knowledge he thus early mastered fitted him for the *rôle* he was destined to play as a reforming physiologist in doctrine and in exposition. His career at Heidelberg is memorable in academic and scientific annals for the intrepidity with which he assailed and seriously invalidated the views of Liebig, particularly in the domain of nutrition, and after his virtually constrained withdrawal from Germany to Switzerland he continued his thoroughgoing independence of investigation and of teaching in the medical school of Zürich. His beautiful memoir on "Licht und Leben" marked him out as a physiologist equally competent in the sphere of speculation and of analysis, and the fame he acquired among the Swiss led to his transference, on the invitation of Cavour, to the then somewhat backward school of Turin. There his early and keenly sympathetic adoption of evolutionist principles brought him much enthusiastic support from the younger generation of students, while he continued to delight and conciliate the older by his lucid exposition of all that was soundest in the new biology. His pupils soon carried his spirit and methods, as well as his doctrines, to other centres of professional education, so that his fame was thoroughly established throughout Italy when some twelve years ago he was called to the chair of Physiology in Rome. Again he made his mark, in spite of much recalcitrant tradition, and year by year he sent forth to the Italian cities and provinces a thoroughly equipped band of working practitioners and hygienists. The good he thus achieved can be estimated only by those who remember the slovenly training so long the rule in Italian Universities; indeed, the reinvigoration of medicine at his hands has been quite as remarkable as the revival of archæology at those of the Germans in the same peninsula. Nothing has been more wholesome for Italy than the substitution within the last twenty years of Teutonic for Latin influences, particularly as these latter were represented by the French. Italy's Gallic neighbours were too nearly akin to herself to exert the same fresh, deeply penetrating reforms in research and in teaching as those introduced by the investigators and expositors of the Rhinelands. While France tended to confirm Italy in her worst, most traditional shortcomings, Germany infused a new life and gave a novel direction to her ideas and her work, and the fruits of her influence have been especially made conspicuous by the Dutchman as to birth, but Teuton as to experience and idiosyncrasy, James Moleschott. It was to express her gratitude for services really inestimable that Italy came forth in all her academic and scientific strength on the 16th inst., when her central school was the scene of a commemoration as brilliant and impressive as it was unique. The brotherhood of science, the intercommunion of diverse yet harmoniously inspired nationalities, the alliance, offensive and defensive, formed between them for the defeat of prejudice and the reclamation of the unexplored or waste lands of thought had no finer illustration than the reciprocity of feeling evoked between the hero of the day and his admirers—a reciprocity which Italy will exemplify on a yet more imperial scale in

the grand concourse of the profession which is to hold its triennial *festa* in Rome in the last week of September, 1893.

ROYALTY AND THE HOSPITALS.

IT is gratifying to see indications that the members of the Royal Family are beginning to resume their public functions and that hospitals are among the first institutions to be favoured with their presence. Nothing could be kinder or more congruous on their part. "A fellow-feeling makes us wondrous kind." The interest of the Royal Family in hospitals has always been great and practical, but it can well be imagined that the keen anxieties and suffering through which they have passed this year have quickened even their sympathy with institutions and with a profession which are associated with sickness and all the "lenient arts" for its mitigation. We are grateful to their Royal Highnesses the Prince of Wales, the Duke of Connaught and the Duke of York for their recent services in this direction, which we report elsewhere. Their example will stimulate the sympathy of others for hospitals, which need and deserve twice as much support as they receive. Nor are we less pleased to think that the active resumption of public functions will be the best remedy for the grief which must still deeply affect the Royal household.

A MEDICAL MAN v. THE GOVERNMENT OF WESTERN AUSTRALIA.

IT is always gratifying to us to record the vindication of an injured medical man, and the gratification is greater in proportion to the strength of his enemies and the delay in his redress. A striking case of the sort is related in several copies of the West Australian (Perth) papers. It is that of a medical man, Mr. Henry Lionel Smith of Albany, who in 1887 was acting medical officer of Albany, and in that capacity was attending a boy named Webb and two or three other patients in the old hospital there. Webb had colonial fever. The hospital had been sold to the West Australian Land Company and the purchasers of it wanted it cleared by the removal of the patients to the new hospital, a quarter of a mile distant. Mr. Smith was only waiting for furniture in the new hospital. The old hospital was surrounded by a stone wall, the stone of which was wanted by the Land Company who had bought the ground. Mr. Smith gave his consent to Mr. Castledine, clerk of works to the Land Company, for the removal of this wall on the understanding that there was to be no interference with the main building in which the three patients were in charge of an orderly. Instead of this the Land Company partly demolished a lean-to wall, thus impairing the building itself, and worse still, after Mr. Smith's visit, proceeded to remove doors. The night following was windy and wet and the boy Webb got congestion of the lungs and was so much worse as to necessitate his removal the next day to the new hospital, in which he died. He was removed with great care by Mr. Smith, assisted by Mr. Stewart. Mr. Smith certified his death to have been caused by congestion of the lungs and suggested an inquest to the resident magistrate. The first day the inquest was conducted by the police sergeant, the second day by the coroner, Mr. Bailey, who was also manager of the Union Bank. The jury consisted of three persons—all which arrangements seem to us very curious where conduct and character turn, as well as questions of cause of death. The verdict of the jury was as follows: "We are of opinion that Joseph Webb came to his death from congestion of the lungs accelerated by undue exposure, and we consider there is no blame attached to the Land Company, but that Mr. Castledine exceeded his instructions in pulling down the hospital door and not replacing it. And we also consider the after-consequences arose entirely from Dr. Smith giving permission to pull down the hospital before all the patients were removed, and that the orderly has been guilty of gross neglect of duty." This permission was exactly that which Mr. Smith had *not* given. About two months after Mr. Smith received a communication from the Colonial Secretary enclosing a minute from Governor Broome, dated July 19th, commenting on the circumstances attending the death of Webb and directing plaintiff's dismissal, the dismissal to take effect at the end of 1888. Mr. Smith remonstrated with Dr. Waylen, the chief of the medical department, and with the governor, and finally appealed to the Secretary of State, with no further effect than to prolong his dismissal into 1889. Nothing remained for him but to enter an action by petition of right to recover £1000 damages from the Government for wrongful dismissal. The Government threw every obstacle in his way, even to pleading an infringement of the Royal prerogative. The Attorney-General was against him in the trial and exhausted every argument and theory to defeat his claim. The Chief Justice took a clear position and stuck to it, but the jury gave a verdict in Mr. Smith's favour and assessed the damages at £200. The Attorney-General again sought to reverse the verdict, on the motion of the plaintiff's counsel to have judgment entered for him, but his Honour was unmovable. He admitted the Crown could do almost anything. It could dismiss without notice and without giving reasons, but if it dismissed a man and gave a cause reflecting on his character he had a right to appeal to the public and to go to the jury. He thought the jury had judged rightly, and refused to interfere with the verdict, though he granted stay of execution at the request of the Attorney-General, that he (the Attorney-General) might appeal to a full court as to the right of the Government to dismiss a servant and abuse that servant with impunity. We desire to concede great rights to Governments and to the Crown for public purposes, but we draw the line at the right to cast a slur on faithful public servants and so to injure them and their reputation for life. Mr. Smith deserves the thanks of the profession and even of the public for his dogged fight with the Government of Western Australia in defence not only of his own character, but of a great public principle, and is entitled to congratulations on his success.

THE PROOF OF DEATH.

THE minds of some persons are haunted by a persistent fear lest their bodies should be buried alive—a fear which is happily almost entirely destitute of any rational excuse. The aspect of death is in every way so different from that of life that it needs no skilled inspection to distinguish it. This is the rule, and one broken but very rarely by an exception. Occasionally, however, some difficulty has arisen even as regards this primary distinction. A case recently reported may be mentioned in illustration. A newly born infant of poor vitality, whose mother died in her confinement, had after a short time apparently died also, and was actually coffined when a cry revealed the fact that it still breathed. Later on the same day the vital flicker again appeared to be extinguished, but this time the care of the medical attendant prevented the occurrence of any mistake as to its existence. It has been suggested that in order to guard against the possibility of any such disastrous oversight in future no certificate of death shall be given except after personal inspection of the deceased by a medical man. We do not know of any objection to this proposal. On the contrary it has much to recommend it. The ordinary signs of death do not require any full explanation on our part. It is worth while to note, however, that such a case as that referred to above is exactly of the kind in which especial care should be exercised as regards this matter. It is where extreme feebleness results in a state of torpor continuing perhaps for days

with faint signs of life, where breath and heart-beat show but an occasional indication, where muscular power is nearly absent, as in old paralytics, and rigor mortis hardly to be depended on, that we seek with some anxiety for absolute proof of death. This is to be looked for in such cases not so much in any isolated sign as in the association of several to the exclusion of all vital manifestations. Among the most reliable indications that life is extinct we would mention rigidity, cadaveric discolourations in relation to position and surface pressure, and as an early and almost certain sign the glairy eyeball, with its pupillary aperture fixed in dilatation.

THE MUNICIPALISATION OF HOSPITALS.

THE *Halifax Guardian* of the 10th inst. contains an excellent article deprecating the municipalisation of hospitals. There are two drifts of opinion just now, as respects hospitals, which need to be resisted. One is to make them municipal or State institutions and to rob them of that virtue and charm (which foreigners, notably Guizot, have so much admired) which attach to voluntarily supported institutions and which distinguish them in fact and in various desirable particulars from a workhouse infirmary. Another is to be found among a certain—we hope a very limited—section of the working classes, who take a wrong view of their contributions to these noble charities and are apt to imagine that they carry a right of ordinary medical attendance. Nothing could be more absurd. When a working man contributes to a hospital he contributes to help himself, a fellow-workman, or his wife or child in case of exceptional sickness or accident only; and this is a high privilege and duty. But it carries no right of attendance for ordinary ailments, for which other regular provision should be made by every self-respecting man. The Committee which has been considering the Report of the House of Lords' Committee is, we understand, likely soon to give expression to the results of its deliberations. We have every reason to think that it will recognise the private and voluntary character of our hospitals.

THE PREVALENCE OF SMALL-POX.

WHILST a wide diffusion of small-pox is still maintained in England and whilst new areas are constantly being added to those already infected, no marked outbreak on an important scale has as yet prevailed except in Warrington, and even there the abatement is maintained, only 12 fresh cases having occurred last week. In Manchester there were during the same period 14 fresh attacks, and in Dewsbury the disease has again broken out, some 12 to 15 patients having sickened. In Leeds 9 fresh attacks occurred, but the patients in the small-pox hospital have been reduced from 56 to 49 in number. At Oldham some 30 patients are in the Westhulme hospital, there are about 29 to 30 under isolation in the hospital used by the Lightcliffe and Hipperholme authorities and 8 patients are in the St. Helens Hospital. In Halifax there were 13 fresh attacks last week; 3 occurred in Barnsley, 3 in Batley, 3 in Chadderton, 4 in Oldham, 2 in Birmingham, 2 in Birkenhead, 4 in Wakefield, 4 in Leicester, 3 in Liverpool, 2 in Sheffield, and slight occurrences, including single attacks, are heard of from Bootle, West Hartlepool, Derby, Northampton, Sunderland, Hull, Lancaster, Runcorn, Nuneaton, Newcastle and Doncaster and also from the rural districts of Leigh and Sedgefield. In the metropolis there were 9 fresh attacks last week and the hospital ships contain about 30 patients. As far as can be judged up to the present date we have to face a somewhat wide dissemination of the small-pox infection; but whether owing to the fact that we have not yet reached the season for its principal activity or to the circumstance that the contagium is not generally prevalent in its most virulent form, there would appear grounds for believing that, apart from the manufacture—so to speak—of any special virulence of infection, as by the aggregation together of the sick in populous places, the prevalence may possibly pass away without leading to a general epidemic. This, however, is mere surmise, and any hopes based on such a view may at any moment be set aside by the onset of conditions, meteorological or other, that have the faculty of adding to the potency for spread of the prevailing contagium.

SPIRITS AND MALT LIQUORS IN WORKHOUSES.

A PARLIAMENTARY return has recently been issued by the Local Government Board showing, in three parallel columns, the daily average number of inmates in the workhouses of union counties, the expenditure on spirits, wine and malt liquors and the average expenditure per head of inmates. The Board has sent these statements to the guardians throughout the country and has especially directed their attention to the great differences in expenditure in respect of wine, spirits and beer for the in-door poor in different districts. These differences do not seem very intelligible from any consideration of climate or circumstance. They are very great. Thus, for example, in Rutlandshire the average expenditure *per inmate* is 12*s.* 10*d.*, while in the northernmost county of England, Northumberland, it is only 4*d.* Between these extremes there is every variety of cost per head. In Hertford it is 8*s.* 2*d.*, in Essex 7*s.* 8*d.*, in Dorset 4*s.* 7*d.*, in London 4*s.* 5*d.*, in Lincoln 3*s.*, and in Lancaster 1*s.* 10*d.* The propriety of such allowances is a difficult question to be settled on no extreme principles. It is largely a medical question—for the sick it is entirely so—which medical men should regard in all its aspects. It would be interesting if, together with such particulars, we could have some information as to the comparative health, longevity and period of residence of the inmates of workhouses which differ so greatly in their allowance of alcohol, and to know what other differences of food obtain that may account for or justify such variations in the allowance of articles on which the poor set such store, but to which they often owe their pauperism. We are inclined to think that where this questionable comfort is withheld some pains should be taken to introduce compensation in the form of better food.

BILIOUS FEVER, NOT YELLOW FEVER.

DR. DOMINGOS FREIRE, whose researches on yellow fever have from time to time attracted much attention and criticism, especially at the hands of Dr. Sternberg of the United States Army Medical Department, has recently[1] demonstrated the fact that the bilious fever of hot countries is a distinct disease from yellow fever, that the symptoms are entirely different, and that the bacteriological causes are also distinct. As regards symptoms he finds that in yellow fever there are three distinct periods—(1) a period of hyperpyrexia, which lasts for twenty-four or forty-eight hours; (2) a short variable period of apyrexia; and (3) a recurrent hyperpyrexia, during which the phenomenon of hæmorrhage and the ataxo-adynamic symptoms appear. The icterus comes on during the second or third period and sometimes even only after death. There are the peculiar look of the face, the watery vomit, which gradually becomes darker or even black, this symptom continuing for a long time; the marked constipation, and only in the later stages diarrhœa. Yellow fever is contagious and does not usually recur; there is no enlargement of the spleen except where there has been antecedent malaria. It is entirely intractable to the use of quinine and its salts. The organism associated with its etiology Dr. Freire thinks is a micrococcus, the so-called micrococcus xanthogenus. In bilious fever, on the other hand, there is a regular

[1] Sur l'Origine Bactérienne de la Fièvre Bilieuse des Pays Chauds. Rio de Janeiro, 1892.

periodic advance, sometimes intermittent, sometimes remittent; in the first case, with marked irregular exacerbations; in the second, with a febrile exacerbation which generally occurs towards evening or during the night. The yellow colouration generally commences at the beginning of the disease and continues throughout its whole course. The characteristic facies of yellow fever is quite wanting, the vomit matter is yellow or green from the commencement and gradually diminishes as the disease advances, bile-stained motions are passed during the whole course of the disease; it is only slightly infectious, but the patient is subject to recurrence of the disease; the liver and spleen are hyperæmic and congested and they often undergo fatty degeneration. The implication of these organs, together with the fact that quinine salts have an almost specific action upon the progress of bilious fevers, indicates that this disease is probably of a malarial nature. Dr. Freire was able, moreover, to isolate a bacillus about $\frac{1}{1000}$ of a millimetre in length and $\frac{1}{5000}$ of a millimetre in breadth, non-motile, deeply stained by methyl violet, sometimes slightly curved and usually containing a single spore at its extremity. These, if not identical with, resemble the organisms described by Klebs and Tommasi-Crudeli. When inoculated they are fatal to guinea-pigs, from the bodies of which they may again be separated. It is interesting to note that he was able to obtain these organisms not only from the blood, but also from the urine and from the bile.

LONDON LAUNDRIES.

APART from the sanitary condition of laundries, which is often so defective as to gravely compromise not only the health of the washerwomen, but that of their customers, complaints have recently and justly been made against the reckless destruction of the linen. The linen is corroded with lime, frayed out and torn with rough handling and wire brushes; flannels are shrunk so that they can no longer be worn, or if worn they are unhealthy, for they have lost their porosity and have become hard pieces of woollen board. In these days of technical education cannot better technical instruction be given to laundresses? and at the close of this century of scientific progress, if "chemicals" must be used, cannot some chemical substance be found that will be less destructive in its effect than those actually employed by laundresses? Any circumstance that leads the public to hesitate in sending clothes to be washed is detrimental, as cleanliness is the first law of health. The whole question of laundry work is important and urgent. With the continually increasing concentration of population the difficulty of washing the linen becomes greater and greater; and new and more scientific methods will have to be applied to meet the circumstances of the case.

NERVE ROOTS OF THE BRACHIAL PLEXUS.

IN the Proceedings of the Royal Society a paper appears by Dr. Risien Russell, giving the results of an experimental investigation of the nerve roots entering into the formation of the brachial plexus of the dog. The methods employed were: (1) Observation of the compound movements in the fore limb of the dog by electrical stimulation of the peripheral end of a whole nerve root which had previously been exposed and divided; (2) minute diffefentiation obtained by electrical excitation of the individual bundles composing such a nerve root; (3) direct observation (after dissection) of the muscles thrown into action by electrical stimulation of the separate nerve roots, and the determination of the question whether a single bundle of fibres representing a single simple movement remains distinct in its course to the muscles it supplies without inosculating with other nerve fibres; (4) whether, when a muscle receives nerve fibres from more than one nerve root, both nerve roots supply fibres to one and the same muscular fibre; (5) the influence of section of one or more roots in excluding certain muscles from a generalised epileptic spasm induced in the limb by cortical excitation; (6) differentiation of parts of nerve roots by the degeneration method. The conclusions from these various methods are confirmatory one of another. It is found that the compound movement obtained by stimulation of a whole nerve root is the result of the synergic action of a group of muscles, an effect which may be resolved into its component parts. The simple movements bear a constant relation to the nerve roots—e.g., flexion of the elbow is always represented one root higher than extension,—and fibres subserving a certain movement have a constant position in the same nerve root—e.g., extension of the wrist is represented by a bundle of fibres in the upper part of the circumference of the root. Each bundle of nerve fibres remains distinct in its course to the muscle or muscles, producing a movement without inosculating with other motor fibres. The action of certain muscles is always found to predominate on stimulation of one root, and if flexion is the gross result of stimulation of one root, extension is the predominant result of the excitation of another. It is also found to be possible by stimulation of a single bundle of fibres in a nerve root to produce contraction of a single muscle, and of it alone, although the same muscle is always represented in more than one root, but to an unequal extent in these. The muscular fibres innervated by one root, however, are not supplied by the other. Similarly by division it is found that a temporary paresis is produced in the group of muscles supplied by a nerve root, but there is no incoördination of the remaining muscular combinations, and in an epileptic spasm produced by cortical excitation the position assumed by the limb is modified by the division of a nerve root, the modification being the result of throwing out of action the muscular combinations subserved by the divided nerve root. The degeneration experiments confirm the results; but the Wallerian law is found to be erroneous in regard to the degenerations resulting from division of the nerve root on the distal side of the ganglion; for, in addition to peripheral degeneration in such a root, degenerated fibres are also found in the part of the sensory root between the ganglion and the spinal cord, a condition which makes it likely that there are certain nerve fibres which do not depend for their trophic supply on the ganglion.

RAILWAY SIGNALMEN.

IN consideration of the fact that so great a proportion of railway accidents have been occasioned by errors in making or in reading signals, it is clear that too much attention can hardly be paid to this department of railway management. Our readers will therefore excuse another reference to a subject, well worn indeed but unhappily never trite. Three weeks ago while discussing the Thirsk accident we suggested the adoption of some system which would obviate as far as possible the necessity of depending for security of life and limb upon the limited and variable capacity of any railway servant. An incident which occurred the other day near Wakefield is worth noting in this connexion. In this case a signalman, apparently in his usual health and on duty, died suddenly, the fact being only discovered when inquiry was made as to why his signals were not working. Of course it is impossible, by the most perfect method, to obtain absolute immunity from the risk of accident. We are also pleased to note the great skill and energy which have been expended by railway companies upon this part of their organisation and the large measure of success which has rewarded their efforts. Not even these considerations, however, can diminish the pressing necessity for further improvements which are suggested by the incident above mentioned. In particular we would again direct atten-

tion to the advantages connected with a system of interlocking signals. Such a system, controlled by electricity and capable of acting only in obedience to that control, is now, we understand, in action upon some lines. It by no means does away with the labour of signalmen, but it greatly diminishes its anxious responsibility. We should therefore welcome its more general introduction. Such a reform, combined with a considerable addition to the numbers of the working staff, should go far to secure for travellers by rail that safety which is their minimum of right.

INFLUENZA.

WE observe in some quarters the expression of a fear that influenza is likely to recur in epidemic form this winter. That in many places there are—and have been for some time—sporadic cases of the malady there can be little question; but, so far as previous experience goes, it is improbable that it will prevail to anything like the extent to which it has done in the past three winters. It is, however, conceivable that local outbreaks may occur in this country, just as in France and elsewhere they have often occurred in the intervals between the greater invasions; and it is therefore incumbent upon us to be alive to this possibility, and inculcate on the sufferers the necessity of the avoidance of fatigue and exposure in the early days of convalescence which so often retard recovery or promote grave sequelæ.

THE LOUTH GUARDIANS AND THE DISMISSAL OF DR. BEST.

A VERY remarkable incident lately happened at the Louth Board—the dismissal by 21 votes to 13, practically without notice and without complaint or reason, of Dr. Palemon Best, medical officer of the Grimoldby district, and the appointment in his place of another medical man who does not seem to have made a direct application for the appointment, though a guardian stated he was prepared to say that he would take it. We were about to express ourselves most strongly on this procedure in our present number as one of the most monstrous and unreasonable steps ever taken by a public body against an officer of high local standing, high professional qualifications and boasting of twenty-five years' service; but on the point of going to press we learn with satisfaction that the guardians have rescinded their former resolution by 17 votes to 8. For twenty-five years Dr. Best had been reappointed without being present or being required to be present. A sort of notice was given him of the meeting at which his appointment was cancelled, but so slight that he did not realise its seriousness and did not attend; but after his most unjustifiable dismissal he demanded, like an honest servant, a hearing, with the result we have stated.

HYSTERIA IN CHILDREN.

DR. F. JOLLY contributes a paper on this subject to the *Berliner Klinische Wochenschrift*. Hysteria in children may take the form of periodical outbursts of peculiar mental disturbances or may produce local symptoms. Most commonly vague pains are complained of in various parts of the body (particularly in the joints), these pains being frequently accompanied with spastic conditions of the limbs (rarely paralyses) and anæsthesias. Both sides of the body are affected in the great majority of cases, although occasionally there may be a monoplegia or hemiplegia. To the above symptoms tremors may be added; these tremors may in some cases be the first thing complained of, especially in cases where traumatic influences have been at work. Further, spasms may occur in the muscles of speech and respiration (sharp cries, singultus &c). The speech may become stammering or confused or the patient become perfectly dumb for a longer or shorter period, and this may even be accompanied by deafness. In some cases observed by Dr. Jolly "hysterical blindness" occurred. As regards anæsthesia of the skin and deeper parts this was usually but slightly marked—diminution of the sense of touch, lessened sensation to pain and contraction of the field of vision. The hysterical attacks were generally characterised by screaming, crying and laughing, accompanied by convulsive movements of the extremities. There was commonly some slight loss of consciousness, but as a rule the patient retained some recollection of what had occurred. The treatment which proved most effectual was isolation, dashing cold water over the child, the faradaic current and judicious verbal correction. With regard to the cause of the hysteria, Dr. Jolly found that there was in most cases a history of a nervous disposition in the parents, this being frequently added to by debilitating diseases and bad feeding, anæmia and unfavourable moral surroundings. Education and imitation also exerted powerful influence.

MODEL LODGING HOUSES.

IT is satisfactory to note that the very active propaganda made in favour of the better housing of the poor and of the working classes is bearing more fruit. In the course of a week we read of the opening of two model institutions of this description, One named Rowton House, close to Vauxhall station, will accommodate 470 toilers at the rate of 6*d*. a night; and the other, in Macklin-street, Drury-lane, will hold 100 persons at the same charge. But close at hand—in Parker-street—the County Council is building a lodging-house which will probably bring down the rent at present levied. It must be remembered that the ordinary price is 4*d*. a night in a registered lodging-house, and that therefore these two model establishments do not cater for the poorest, the lowest, the dirtiest sections of the population, for those in fact who most need "paternal interference." They will, however, help those who are already seeking to help themselves and will make their path upwards towards respectability more easy to tread. This, though not the most needful, is nevertheless good work. The artistic decorations of the lodging houses and the facilities for reading will do much in the educational sense; while the excellent provision for cooking, washing of clothes and of the person, and the effort to grapple with the difficult question of ventilation will very materially contribute to the improvement of health.

THE ADMINISTRATION OF PURE OXYGEN.

ADVERTING to the employment of oxygen for the limelight and other purposes, Mr. T. C. Hepworth points out that the success of this comparatively new industry (the separation of oxygen from the air) has been so marked that, as a natural result, competitors with rival processes have come forward. But, according to his experience, the rival product turns out oftentimes to be not oxygen, but a half and half mixture of oxygen and air, with a slight excess of the latter. He recently obtained, for instance, a sample of gas from a dealer, which on testing (with a Hempel absorption pipette charged with metallic copper and ammonia) was found to be a mixture containing only 60·6 per cent. of oxygen. He next tested the illuminating power of this highly diluted oxygen with a lime-light jet, and for sake of comparison placed by its side a precisely similar jet supplied with Brin's oxygen, and as might have been expected, the light given by the former was little more than half as intense as that afforded by the latter. With the good oxygen the lime cylinder was quickly pitted, whilst the other showed no symptom of destruction. It is also to be remarked, he says, that the consumption of the diluted gas is, for a given period, about one-third more—striving with both jets to get the best possible light—than that of good oxygen. On the same principle, a mountaineer at a high altitude will pass a greater volume of air through his lungs in a given time than he will when he is in the valley breath-

ing that which contains the normal quantity of oxygen. He concludes that this matter is of great importance to many workers, and might be one almost of life and death in the case of a patient for whom inhalation of oxygen had been prescribed. If this be so, our readers will be grateful to our correspondent for these words of necessary caution.

DRAINAGE OF FROGNAL.

THE inhabitants of Hampstead and Frognal are becoming alarmed at the appearance of typhoid fever and diphtheria in their midst and seem disposed to blame the main drainage of Frognal for their continued prevalence. The matter has been referred to the London County Council, who will doubtless make inquiry into the allegations that have been made.

TYPHUS FEVER IN DUNDEE.

THE spread of typhus fever from Dundee into the neighbouring village of Monifieth is creating a scare and will, it is expected, lead to the provision of some form of permanent hospital isolation in the district. Scarlet fever and measles are also causing anxiety and parents are urged to discourage during the Christmas holidays assemblages such as children's parties, which are often a fruitful source of epidemic extension of those diseases.

TREATMENT OF LUPUS.

DR. SHLAPOBERSKI has found the caustic action of nitrate of silver in contact with iodoform, which it decomposes with a hissing noise, very efficacious in the treatment of lupus. In an obstinate case he scraped away all the large nodules and applied nitrate of silver, afterwards covering the parts with collodion containing 10 per cent. of iodoform. The treatment was renewed daily. In three months there was a decided improvement, and in seven months the parts were entirely healed. There has since been no recurrence though more than four years have elapsed.

CORROSIVE SUBLIMATE AS A GERMICIDE.

DR. C. T. MCLINTOCK[1] has made some extensive researches upon corrosive sublimate as a germicide. His experiments show that this substance is not a strong germicide, as germs withstand its action for some time. He maintains, however, that though corrosive sublimate is not a good germicide that is no proof that it may not be valuable as a disinfectant. As is well known, of all substances it has the greatest antiseptic power, and, according to Dr. McLintock's theory, a germ treated with sublimate, unless perchance it gets into the blood or is exposed to very exceptional conditions, is powerless to grow—that is to say, it is probable that a spore of subtilis or anthrax treated with sublimate (1 in 1000) and then thrown on the soil or into water will not germinate owing to the fact that the capsule of sublimate surrounding it is not removed. The former experiments alleged to prove its germicidal power were faulty, inasmuch as in some there was carried over with the disinfected material enough of the sublimate to act as an antiseptic; in others, as those of Abbott, it was not recognised that the sublimate combined with the investment of the germ and prevented any growth, especially in solid media. Again, different cultures have, as pointed out by Esmarch and Gruber, very varying powers of resistance, an all-important factor in determining the germicidal value of any agent. Corrosive sublimate forms with cellulose, as cloth, filter paper &c., with silk, with albuminous bodies, with some part of bacteria, probably the envelope, a chemical compound that cannot be removed by any amount of washing with water. Thus sublimate when acting on a germ forms a capsule around it that protects the germ for a time from the further action of the sublimate, and in turn forms an impenetrable barrier to the growth of the organism unless removed. This barrier may be removed with salines and is more rapidly removed in proportion to the renewal of the saline, conditions that are fulfilled in the circulating blood. The action of sublimate on bacteria is probably closely analogous to that of alcohol. All experience leads to the belief that absolute alcohol is immediately fatal to protoplasm, and the only way that we can explain the fact that spores may survive in absolute alcohol for weeks is on the assumption that the alcohol somehow changes the envelope of the spore, rendering it impermeable. Dr. McLintock thinks with De Barry that the presence of a gelatinous envelope in many, if not all, bacteria at certain stages of their life history has not received the attention it deserves. This envelope probably serves the organism in protecting it against temperature, dehydration and chemical agents. Whether the germs contained in solutions treated with sublimate, and disposed of as such material usually is, do or do not grow remains to be proved.

[1] Medical News, Oct. 8th, 1892.

PREVALENCE OF MEASLES.

MEASLES is still rife in various parts of the country, affecting chiefly school children, and the question of school closure affords ground for animated debate as well as for divergence of opinion and practice. Thus at Leith, where the disease is still extensively prevalent and many children are away from school, it has been eventually decided that the schools shall remain open. On the other hand, at Wishaw, Pudsey and Hull it has been determined to resort to closure. At the latter place there have during the past four weeks been some 600 cases and forty of them have proved fatal. In the face of this it has been wisely decided to include measles in the list of notifiable diseases, at least for a time. It is pleasing to learn that measles is distinctly declining in Aberdeen.

THE CORONER OF OXFORD AND THE INFIRMARY.

THE *Oxford Times* of Dec. 17th contains the report of an inquest on the body of a dairyman, who had lately been in failing health. After delivering all his milk on Dec. 6th he was found dazed and ill by the side of his horse, which he was holding by one hand. One of the witnesses, Mr. Charles Howard, gave an excellent account of his symptoms and of going to his assistance. Deceased was taken to the infirmary on an ambulance and died the next morning. He was promptly seen there by the house surgeon, who diagnosed cerebral hæmorrhage, of which there was hemiplegia and every other symptom, and by him was transferred to Dr. Dalgliesh, the house physician, a graduate of Durham, who had held similar offices in Leeds and Newcastle. Dr. Collier was in the hospital almost immediately afterwards, but an urgent diphtheria case requiring tracheotomy distracted Dr. Dalgliesh's attention and he forgot to ask Dr. Collier to see the case. The man got worse so rapidly and his condition was at once so hopeless and so clear in a diagnostic sense that he did not send for Dr. Collier. A certificate in accordance with the facts was given. But the coroner "heard enough," as he thought, to stop the funeral, hold an inquest and make some very severe reflections on the infirmary and the patient being there twenty-four hours without seeing one of the physicians. Undoubtedly urgent cases should be seen as a rule by the honorary officers; and here it would have been well had this been the case. But we think the remarks of the coroner were grently in excess of what was called for. The man received prompt attention from two able officers and according to the clear evidence every care that could have benefited or saved him. We think it would have been much better had the coroner ordered a post-mortem examination and supplied the jury with solid facts in place of his own remarks.

ACUTE MIGRATORY OTITIS.

DR. SZENES of Budapest proposes the term "acute migratory otitis media" for a class of inflammatory diseases of the middle ear. He has seen three instances in which one side is first affected and about three days after complete recovery the middle ear of the opposite side. This migration or metastasis is not easily accounted for, but it may be analogous to the somewhat rare migratory form of pneumonia where a small portion of the lung is first attacked and after its recovery another and perhaps distant and larger portion becomes affected. In the first case of migratory otitis seen by Dr. Szenes the left ear was first attacked, the process becoming suppurative. When the inflammation appeared in the right ear energetic measures—as local bloodletting and cold compresses—were successfully employed to prevent suppuration. In the second case there was no suppuration either in the right ear—which was the one first attacked—or in the left. In the third case there was suppuration on both sides.

FOREIGN UNIVERSITY INTELLIGENCE.

Rostock.—Dr. Christian Lemcke, who has been Docent in Laryngology and Otology since 1885, has been raised to the rank of Extraordinary Professor.

St. Petersburg (Military Medical Academy). — Dr. Blumenau has been recognised by the conference of the Academy as *privat-docent* in Diseases of the Mind and of the Nervous System, Dr. Massen as *privat-docent* in Midwifery and Gynæcology, and Dr. N. Kuskoff as *privat-docent* in Pathological Anatomy.

Tomsk.—There are now 302 students in this University which at present contains only a medical faculty. The majority of them were educated at clerical seminaries in European Russia and at gymnasia in Siberia. A great many of them are in needy circumstances, and are receiving assistance from various sources. The cost of the University to the imperial funds amounts to about £20,000 annually. During the past year surgical, therapeutical, obstetric and gynæcological clinics have been opened, though the number of beds is very limited. Next year clinics for children and for eye and skin diseases are expected to be opened, besides a second surgical clinic.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Kraus, Medical Inspector in Hamburg, of cholera, in Altona.—Dr. Karl Petersenn, formerly chief Medical Officer of the Riga Marine Hospital.

A MEMORIAL has been presented by Sir Henry Roscoe, M.P., to Earl Cowper, chairman of the Royal Commission on the proposed Gresham University. The memorialists "respectfully record their strong opinion that the foundation of a teaching university for London, without due provision being made for higher education and original research, would be unworthy of the metropolis, and would entail the neglect of an admirable opportunity for promoting the advancement of science and learning."

THE Library of the Royal College of Surgeons has been enriched by the presentation of a large collection of Russian medical dissertations and other works by Dr. Theodore Maxwell of Woolwich. Dr. Maxwell, whose linguistic powers have been amply exhibited in his valuable "Terminologia Medica Polyglottica," has also prepared a catalogue of these works, containing references to abstracts of some of them which have appeared in THE LANCET and elsewhere.

LUNACY IN ENGLAND, SCOTLAND AND IRELAND DURING THE YEAR 1891.

WE have before us the Reports for the year 1891 of the Commissioners in Lunacy for England, of the Commissioners in Lunacy for Scotland and of the Inspectors of Lunatics for Ireland. The returns show that the numbers of the insane under official cognisance in the three portions of the kingdom on Jan. 1st, 1892, were:—

—	Males.	Females.	Total.
England and Wales ..	39,630	48,218	87,848
Scotland	5982	6817	12,799
Ireland	8405	8284	16,689
Total	54,017	63.319	117,336

Dealing first with the report on lunacy in England and Wales it is found that there is an increase in the numbers of 1053 as compared with those returned on Jan. 1st, 1891.

While these are the numbers under the official cognisance of the Commissioners they say in a footnote that the detailed report of the Registrar-General showing the total number of insane persons in England and Wales as enumerated at the last census will not be published for another year. In the statistics of the report the statutory definition of the word "pauper" is adhered to as meaning a person who is "wholly or partly chargeable to a union, county or borough," whilst the word "private" is held to include all persons who are not paupers. The figures in January, 1892, show, as compared with the previous January, an increase of 73 (40 males and 33 females) in the private class, an increase of 954 (418 males and 536 females) in the paupers, exclusive of an increase of 26 (10 males and 16 females) in the criminal patients. A decrease of 300 in the insane in ordinary workhouses is regarded as in some measure due to the removal to asylums of patients not unfit for workhouse care, but for whom there is in workhouses a deficiency of accommodation and an indisposition on the part of guardians to provide it by building. Another year's experience confirms the Commissioners in their opinion that the costly proceedings under Section 24 of the Lunacy Act by magistrates' orders and medical certificates tend to restrict the registration of patients in workhouses and

The following summary shows the classification and distribution of the patients on Jan. 1st, 1892.

Where maintained on Jan. 1st, 1892.	Private.			Pauper.			Criminal.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
In county and borough asylums	445	558	1,003	24,366	30,048	54,414	69	23	92	24,880	30,629	55,509
In registered hospitals	1,840	1,686	3,526	143	92	235	2	1	3	1,985	1,779	3,764
In licensed houses:—												
Metropolitan	806	833	1,639	374	573	947	—	—	—	1,180	1,406	2,586
Provincial	592	810	1,402	276	362	638	3	—	3	871	1,172	2,043
In naval and military hospitals and Royal India Asylum	240	16	256	—	—	—	—	—	—	240	16	256
In Criminal Lunatic Asylum, Broadmoor	—	—	—	—	—	—	482	157	639	482	157	639
In workhouses:—												
Ordinary workhouses	—	—	—	4,687	6,272	10,959	—	—	—	4,687	6,272	10,959
Metropolitan district asylums	—	—	—	2,841	3,098	5,939	—	—	—	2,841	3,093	5,939
Private single patients	195	252	447	—	—	—	—	—	—	195	252	447
Out-door paupers	—	—	—	2,269	3,437	5,706	—	—	—	2,269	3,437	5,706
Total	4,118	4,155	8,273	34,956	43,882	78,838	556	181	737	39,630	48,218	87,848

also sometimes promote the removal to asylums of cases which might be adequately cared for in workhouses. It is, we think, high time, as we have several times pointed out, that steps should be taken for the removal of such stumbling blocks to the proper working of an Act which has much to recommend it in many respects.

From Table I. we gather that the numbers of the insane at the various stages of ten years from 1859 were the following :—

1859	36,762	1879	69,885
1869	53,177	1889	84,340

The numbers on Jan. 1st for the last three years were : 86,067 in 1890, 86,795 in 1891, 87,848 in 1892 The average annual increase in the ten years from 1882 to 1892 was :—

—	Males.	Females.	Total.
Private	21	55	76
Pauper	566	657	1223
Criminal	1	—	1
Total	588	712	1300

The total lunatics to population were in the following ratio per 10,000 :—

1859	18·67	1890	29·02
1869	23·93	1891	29·85
1879	27·54	1892	29·88
1889	29·65		

On this subject the Commissioners have had to correct the figures that they had entered in the last few reports. They state that "as the annual increase of population for the last nine years appears to have been somewhat over-estimated, the fresh calculations now published show that the ratio of the fresh admissions to the corrected population is somewhat higher than was previously apparent." "Taking into account," they add, "that the admissions of the last two years have been swelled by the reception from workhouses of a considerable number of patients previously classed therein as of unsound mind, and enumerated in our returns, and only removed owing to insufficient accommodation in the workhouses, this Table does not indicate that the ratio of *fresh* cases of insanity to the population is materially increasing." It is something, at all events, to get a definite expression of opinion from the Commissioners on this vexed question. It is satisfactory indeed that the complicated statistics on the point have at last reached a stage of settlement, as it were, which permits a reckoning to be made in terms such as those used by the Commissioners, who are best able to sum up all the *pros* and *cons* that must be weighed before anything like an authoritative opinion can be arrived at. The feeling throughout the country, due partly to a greater interest in the subject and partly to the daily announcement of the enlargement of our pauper and other asylums, is undoubtedly that an absolute increase of the insane to the population is taking place. We take it that the measure of this increase is the satisfactory one given by the Commissioners—namely, that it is not a *material* increase. Our curiosity in this matter will not be satisfied until we have seen the forthcoming return of the Registrar-General as to the total number of insane persons throughout the country, including those who are outside as well as those who are within official cognisance. For it cannot be doubted that the still remaining difficulties as to certification and the cumbrousness generally of the process of having a person for his own good removed to proper asylum care compel a large proportion of lunatics to wander and drift about in our midst to the no small danger of the community or of themselves.

The insufficiency of asylum accommodation is strongly commented on by the Commissioners. The pressure for asylum room continues in undiminished severity, and the Commissioners do not find that County Councils are more prompt than their predecessors who had the control of asylums in adopting measures of relief. They refer to at least twenty counties that are defective in respect of the provision of proper accommodation for their insane, and their strong remonstrance on the subject ought to have weight with County Councils and make them bestir themselves for ameliorating the condition of the hapless insane who come under their jurisdiction.

In other asylums defective sanitation gives only too much colour to the belief that its influence is productive of diseases which would not otherwise present themselves among asylum inmates, and for this no sort of excuse can be advanced. Mere want of money must not be urged under such circumstances where a person is shut up and has his health seriously, if not fatally, attacked by dysenteric diarrhœa, typhoid fever, pneumonia, erysipelas &c. arising from foul drains, defective closets and the like. The Commissioners continue to recommend in all cases where defective sanitary conditions exist a thorough rearrangement of drains and sewerage under competent advice as at once the most effectual and the most economical remedy.

(To be continued.)

CHOLERA.

CURRENT NOTES, COMMENTS AND CRITICISM.

THERE is much more difficulty in affording an accurate chronological and geographical record of the distribution and progress of cholera from week to week than might be supposed. In the first place, there is a good deal of reticence on the part of officials and others about notifying cases on account of the real or supposed injury that any declaration of the kind might cause to the commercial and other interests of the locality or town concerned; then there is the difficulty attending the appearance of isolated or sporadic cases that their precise nature cannot always be determined at the time, and the consequent delay involved. But it is safer under the circumstances to include all cases of apparent among those of real cholera at the present time; for it is these sporadic cases that possess a good deal of significance as indications, on the one hand, that the disease is not dead, and, on the other, they occasionally serve as aids in attempting to forecast the future. Another difficuly, too, in preserving an accurate cholera record arises from the occasional repetition by different papers of intelligence already recorded as if it were new. For instance, the figures forming the total number of cholera cases and deaths in Russia recently announced as the latest official statistics have been already published in THE LANCET of last week.

There have been some indications of a recrudescence of the disease on the Continent during the past week. The weather has been exceptionally warm and damp for the season. The temperature at Hamburg, for instance, was 50° F. at the beginning of the week.

As regards France there were 6 deaths from cholera in Paris in the week ending the 3rd inst. and 4 deaths from diarrhœa among adults. At Dunkirk an *infirmier* at the cholera barracks died of that disease on the 15th, and a fresh case is reported at Condekerque-Branche, a village close to Dunkirk. We have heard nothing lately from Marseilles nor have we learnt any particulars of the extent of the outbreak—said to be serious—at L'Orient or of that at Epernay.

At Hamburg there has been a reappearance of the disease, although not to any extent. The Cholera Commission of the Hamburg Senate announces that a patient brought to the hospital for treatment on the 16th and another who was taken ill subsequently have been found to be suffering from Asiatic cholera. One of the cases originated in the city and the other in the suburb. No cases have occurred in the harbour district since Oct. 13th last. A death from cholera took place at Hamburg on the 12th, and two fresh cases occurred in the same house in that city on the 16th inst. According to the latest intelligence two fresh cases of cholera were reported on the 21st inst., and it is stated that there were also seven cases of suspected cholera. The Commission subsequently reported that the two cases which occurred on the 20th were found to be cholera on bacteriological examination, but both appear to be a mild form of the disease, one of the patients being already nearly well. The Board of Health have been occupied, it is alleged, in preparing for a possible fresh outbreak of the disease in the spring.

From Budapest it was reported at the beginning of the week that cholera had broken out in the garrison of the fortress of Petervardein in South Hungary, but no further intelligence in regard to it has since reached this country. There were two fresh cases and one death reported from Pest on Sunday last.

PRECAUTIONS AGAINST CHOLERA.

CONFERENCE OF PORT MEDICAL OFFICERS OF HEALTH.

DR. COLLINGRIDGE, medical officer of the port of London, is to be congratulated for taking the initiative in convoking a conference of port medical officers of health. The Lord Mayor of London has also rendered great service in throwing the Mansion House open to this meeting and by the hospitable reception he accorded to the medical officers. The result has been a good attendance of port medical officers, though there were some absences which were as significant as they were to be deplored. Dover, Folkestone and Newhaven were not represented, though it is at these three ports that by far the greatest number of passengers coming from cholera-infected districts have landed and are continuing to land, for the cholera epidemic has not yet entirely subsided. There were present at the Conference Dr. Collingridge for the Port of London; Dr. Mason, Hull; Mr. Harris, Southampton: Mr. Gurney, Harwich; Dr. Armstrong, Newcastle; Dr. Wood, Sunderland; Dr. Piggott, Teignmouth; Dr. Lawton, Poole; Dr. Malcomson, the Tees; Dr. Elliston, Ipswich; Dr. Styan, Ramsgate; Mr. Watson, Rochester; Dr. Brown, Colchester; Mr. Bately, Great Yarmouth; Dr. Wynne, Lowestoft; Mr. Wellington, Wisbech; Dr. Fausset, Fleetwood; Dr. Simpson, Weymouth and Portland; Dr. D. S. Davies, Bristol; Dr. Campbell, Gloucester; Mr. E. Davies, Swansea; Dr. Walford, Cardiff; Mr. Tratman and Mr. J. C. Heaven, Bristol (assistants); Mr. Williams, Plymouth; Mr. Griffith, Milford Haven; Dr. Evers, Faversham; Mr. Clegg, Boston; and Mr. E. P. King, Chepstow.

The Conference met on Saturday morning and the proceedings were opened by the Lord Mayor, who said he was proud to welcome the medical officers who had so far perfectly succeeded in protecting England from the scourge of cholera. He congratulated the medical officers for seeking to come together so as to carry out their work in an intelligent and uniform manner. By exercising their powers with gentleness and without unnecessary severity they would best succeed, for they would thus avoid exciting the ill feeling of a large section of the community.

The Lord Mayor having retired, Dr. Collingridge was elected to the chair. The Conference commenced by discussing a resolution brought forward by Dr. Armstrong of Newcastle, to the effect "That it is desirable that medical inspection for the prevention of cholera should be kept up by day and by night without any intermission." To this it was objected that a very large increase of the existing staff would be necessary, and Dr. Mason of Hull maintained that it was extremely difficult, and often very dangerous, to carry out night inspection on the rough and broad waters of the Humber. The Chairman, however, stated that the resolution only suggested the desirability of night inspections as a general principle, though of course exceptions might be made where justified by special local difficulties. The words "as a general principle" being added after "it is desirable," the resolution was carried by 24 to 4 votes. It was further decided that all ships coming from an infected or suspected port should be thus inspected, and then followed a lengthy discussion as to what ports were to be considered infected. Dr. D. S. Davies moved that an official list of foreign infected ports should be issued by the Local Government Board. Mr. Harris suggested that such a list, if published in the *Official Gazette*, would prevent the friction and disputes that arose between port officials and ship captains and owners as to the ports that were or were not infected. Dr. Armstrong thought that there ought to be some compulsory form of international notification; this should comprise the notification of suspicious cases; for it was while "people were fiddling about with bacteria" that all the mischief was done. Dr. Collingridge, however, urged that no Government dare issue such a list. At the present moment the whole coast line from St. Petersburg to L'Orient was infected. Hamburg was still infected, yet no Government, in the face of the official declarations to the contrary, dare place Hamburg on an official list of infected ports. The only practical course would be for the medical officers themselves to issue a list for their own guidance. Other speakers complained that the Government had not given sufficient help and that ships arrived with clean bills of health given them by British consuls, though the newspapers all declared the towns in question to be infected. It was a difficult matter to make a ship miss a tide when the evidence as to infection was of so conflicting a character. Dr. Davies of Bristol seconded Dr. Collingridge's proposal. Dr. Wynne of Lowestoft urged that the chief difficulty was with the fishing boats, especially the steam trawlers that run in and out so rapidly from different ports according to the condition of the fish market. This opinion was endorsed by Mr. Griffith of Milford Haven. The Congress then decided that the London Port Sanitary Authority should be requested to issue as occasion arose a list of infected ports, for the guidance of all the port medical officers.

The next question was the power to stop ships for medical examination. Dr. Mason maintained he could not properly examine 300 or 400 emigrants in the dead of the night and that he ought to have power to keep ships from entering dock before daylight. Mr. Harris agreed that ships should not be allowed to enter dock without a certificate and should therefore have to wait till the medical officer had been able to visit the ship and give the certificate. If the ship owners or their agents would agree to help the delay would be but slight, as they could warn beforehand the medical officer when their ships were approaching the port. Another delegate suggested that as the pilot was master of the ship pilots could be informed that according to the cholera circular they would be fined £50 if they brought the ship in previously to its being visited by the medical officer. Then, again, an arrangement could be made that no Custom officer should go on board till after the medical inspection. These suggestions had been carried out in several ports. Mr. Wellington of Wisbech caused a considerable sensation by explaining that he lived six miles off the port and that he was sometimes nine miles away on his rounds when a ship came in. It was the little ports that were the weak side in our armour. In large ports the work was done fairly well. To catch a ship at Wisbech he had been obliged to start at three in the morning and go out a distance of fifteen miles over rough water. Dr. Armstrong energetically declared that the little ports offered the greatest danger; they were the back door through which the cholera would enter while the front door was carefully guarded. The Conference ultimately decided to approach the Local Government Board so as to ask for compulsory powers of detention of ships from suspected or infected ports, and that these ships should not be released till they had received a certificate from the port medical officer. This was carried unanimously. It was further resolved unanimously, in respect to the 17th Section of the Quarantine Act, "that the detention of the port medical officer on board ships not having received pratique is objectionable." As a matter of fact, medical officers came off such ships constantly, though by so doing they were liable to six months' imprisonment and a £300 fine. In view of increasing the staff of port medical officers and so as to satisfy the exigencies of commerce the Conference voted that it is desirable arrangements should be made for the prompt medical inspection of ships arriving from infected or suspected ports and their subsequent supervision. As so many ships came from ports that are but a few hours' journey away their subsequent supervision is very essential. Then, again, the Conference decided that false answers made to questions put by the port officials to masters of ships concerning the health of anyone on board should be treated as a penal offence. The Conference laid down the principle that all ships from infected or suspected ports should be treated as infected till found otherwise and this was to apply equally to short sea passages. If in spite of this the ship entered dock the penalty, instead of being only £50, should be so increased as to act as a genuine deterrent. Mr. Harris related that a ship's master whom he had kept out of the Southampton docks afterwards stated that, had he known the penalty was only £50, he would have entered in spite of instructions to the contrary. Complaints were made that fishing boats carried no flags at all, and it was urged that vessels coming from infected ports should signal themselves. On the proposal of Dr. D. S. Davies, seconded by Dr. Wynne, it was resolved that "power be obtained to enforce the hoisting of a signal by all vessels, including fishing boats, coming from an infected or suspected port, or having been in communication with such vessels." After a good deal of conversation, which showed that while some ports had taken many precautions others were not at all prepared to meet an epidemic of cholera, it was determined that a return should be obtained from every port as to the preparations that have been made, notably in reference to

cholera hospital, steam launches, staff, number of ships entering each port &c.

The Conference now began to discuss the all-important question of quarantine, which was defined as the detention of a healthy ship. Mr. Williams stated that at Bridgewater a man belonging to a vessel from an infected port was seized with cholera in a train and travelled many miles in an unconscious condition. Mr. Harris was the only speaker who insisted on the fact that passengers from infected towns could penetrate into the country without entering the Thames or any of the ports where inspection was organised. Dr. Mason insisted on the importance of the second line of defence. A man who had landed from a ship at Hull had been seized an hour after medical inspection, but the second line of defence was ready and in another hour's time he was in the cholera hospital. Dr. Davies proposed and Dr. Mason seconded, "That in the opinion of this Conference quarantine or the detention of a vessel having no sickness on board and so certified by the medical officer of health is unjustifiable."

Dr. Collingridge pointed out that quarantine in the Port of London would mean the detention of 2000 to 4000 persons per week on board ships at the mouth of the river; and, inasmuch as anyone would be able to land at night for half-a-crown, it would be useless. Quarantine might be excellent in theory—it was absurd in practice; and the Conference should emphatically declare, once and for all, that quarantine could not be relied upon and therefore must not be attempted. This advice the Conference followed, for the above resolution declaring quarantine unjustifiable was carried unanimously.

While disapproving of quarantine, the Conference approved the practice of taking the name and addresses of passengers and of the crew, and, to simplify the procedure, voted that these addresses should be communicated direct from the port medical officer to the medical officer of health of the district where the passenger was about to reside. Dr. Collingridge described how, on investigation being made, it was found that, out of a large number of Jew emigrants coming to London, 30 per cent. had given false names and addresses. Several hundred of these Jew emigrants had not been allowed to land, and the ships' companies were obliged to convey them back to Germany, because they were dirty and could not give their addresses. The *Cholera Circular* had very effectively checked the tide of foreign pauper emigration to London. A resolution was passed requiring lodging-house keepers to have a register containing the particulars regarding sailors and others who came from infected or suspected ports.

The question of disinfection was now brought forward, and the discussion showed that the vaguest ideas prevailed on this matter. No one attempted to indicate how a ship should be disinfected. It was acknowledged that the bilge water was too considerable in bulk to be disinfected, and therefore should be pumped out, but the danger of such a practice for inland ports was not touched upon. Nor did anyone venture to describe how the cabins, hold or cargo of a ship were to be disinfected, and nothing was said as to the manner bedding, clothing, furniture, carpets &c. removed from a ship should be treated. There is no general principle governing these operations and every port authority does just what it can or what it likes. The Conference, in the face of this deplorable and dangerous state of affairs, carried a resolution to the effect that "more efficient methods of disinfection be applied," and a committee was elected for the purpose of investigating the entire question.

In respect to hospital accommodation, the necessity of not confusing the general infectious diseases hospital with the special cholera hospital was insisted upon. Several speakers described the difficulty of building cholera hospitals on shore in consequence of the opposition of the population. At Sunderland there had been violent demonstrations against the cholera hospital. Thousands of people gathering together, headed by brass bands, had mobbed the authorities and stoned the medical officer. On the other hand, considerable objection was made to floating hospitals, as these could only be placed on the smooth water of a river, which might easily be contaminated by the patients. Then, again, the amount of accommodation provided in cholera hospitals was not based on any sort of principle and did not correspond with the traffic in the ports or their population. Nor was there at these hospitals or elsewhere the means of giving baths and properly disinfecting the crew and passengers from an infected ship. The Conference voted that it is the duty of the sanitary authorities to provide forthwith proper and special hospital accommodation for the treatment and isolation of cholera cases.

The difficulty of finding the necessary funds to meet all this expenditure was discussed. Under the stress of panic money was forthcoming, but it was more needed beforehand. When the panic begun it would be already too late. At Southampton the cost this year was equal to a twopenny rate and it was doubtful whether the ratepayers would again support such an outlay; at Weymouth and Portland Roads expenses had to be incurred without any compensation. The shipping brought no trade to a port of refuge; it was all cost and no profit. Some ports were extremely poor and yet had to pay for protecting rich inland manufacturing districts from the danger of cholera. The Conference resolved that "Special precautions against cholera, being incurred for the benefit of the entire country, should be defrayed by the Imperial Exchequer."

Dr. Collingridge now explained that the Conference had accomplished the first part of its task, they had come to a common agreement as to what was most needed. The next step would be to invite the sanitary authorities to hold in London a larger conference; and, travelling over the same ground, reaffirm the principles established that day. Then the Local Government Board could be approached by a representation from the entire country; and, by that means, the desired reforms might be obtained. This proposal was adopted. The Conference finally carried a vote of thanks to the Lord Mayor of London; to the chairman, Dr. Collingridge; and to the various port authorities, Custom House Officials &c., who had assisted the Port Medical Officers in their difficult task of warding off the cholera epidemic. In the evening, a number of the members of the Conference dined together at Frascati's Restaurant, and thus terminated a gathering which had lasted, with but brief intervals, for close upon twelve hours.

THE RUSSIAN CHOLERA CONGRESS.

THE fatality connected with the cholera epidemic which has been raging during the present year, and which, according to official records, has carried off some 280,000 victims, has induced the Zemstvo (local) medical practitioners to hold a Congress at St. Petersburg to discuss various questions in connection with the epidemic, and to devise or suggest measures it would be expedient to adopt in view of its probable appearance next year. No one not personally engaged in the work of combating the disease will be admitted to the Congress. Physicians and reporters for the Russian press will, we are told, form no exception to this rule. An official specially appointed for the purpose will attend the meetings and will receive all the papers from the authors immediately after each has been read. The Congress will assemble on Dec. 25th (new style) and will continue its sittings for a week. The following is an abridged programme of the proceedings:—

On the first day (Sunday) the members will receive the whole of the statistics relating to the epidemic, together with reports on the causes and conditions of the outbreak (illustrated by plans, maps &c.), the measures devised for the sanitation of places of public resort as well as of personal cleanliness. Monday, the 26th, will be devoted to meetings of committees, the demonstration of approved methods of disinfection, the exposition of measures, against the importation of cholera (quarantine, cordons, closing of schools, prevention of extensive migration of the population, overcrowding, provision of reception-rooms for the sick, organisation of registration &c.). On Tuesday, in addition to the committee meetings, the report on measures for combating the epidemic will be discussed, such as the organisation and determination of the amount of medical aid and the appointment of stationary and flying columns, isolation, means to be employed for the proper burial of cholera patients, disinfection &c. The proceedings of the Congress on Wednesday and Thursday will consist chiefly of discussions on reports of committees detailed off to consider the various subjects included in the foregoing programme, which committees will hold a general session on the evening of Thursday and be continued on Friday and Saturday. On Sunday the proceedings of the Congress will close with the usual formality.

ROYALTY AND HOSPITALS.

ST. MARY'S HOSPITAL.

ON Saturday last, Dec. 17th, the foundation stone of the new wing of St. Mary's Hospital, Paddington, was laid by His Royal Highness the Prince of Wales. The wing, which is to be called "The Clarence Memorial Wing," will cost when built £100,000, and of this sum one-fifth has already been received. Among the distinguished guests who assisted at this ceremony were the Duke of York, president of the hospital, Princess Maud, the Duke of Fife and the Duke of Cambridge. An address was presented to His Royal Highness which referred to the fact that "the original foundation stone of this hospital was laid forty-seven years ago by your Royal Highness's illustrious father, the first stone of an enlargement was laid twenty years later by your Royal Highness and a further extension was opened by Her Royal Highness Princess Louise, Marchioness of Lorne, in 1883." His Royal Highness, in thanking the governors for the kind welcome they had extended towards him, said he hoped the new site and the new façade would fulfil all local wants. Referring to his son's acceptance of the presidency of the hospital, he said he knew what a satisfaction it was to his son to accept this honour not only on account of the great philanthropic objects of the institution, but to render some debt of gratitude to the distinguished physician, Dr. Broadbent, for the great care with which he had attended him during his long and serious illness of last year. The Prince of Wales then formally laid the stone, after which his Royal Highness presented awards to successful students.

THE ROYAL EYE HOSPITAL, SOUTHWARK.

On Thursday, Dec. 15th, His Royal Highness the Duke of York honoured the neighbourhood of the Borough with his presence for the purpose of opening the new Royal Eye Hospital. The imposing ceremony took place within the Surrey Theatre, where there were assembled the Duke of Cambridge, Admiral the Hon. Sir Henry Keppel, the Lord Mayor, the Earl of Kilmorey, the Bishop of Rochester, the Bishop Suffragan of Southwark, Archbishop Vaughan and others. On arriving at the theatre the Duke of York was saluted by the hospital companies of the Volunteer Medical Staff Corps, who formed a guard of honour. Receiving a golden key His Highness inserted it in a model lock electrically connected with the hospital, thus completing the circuit, simultaneously opening the hospital and discharging the signal cannon. A novel feature of the opening of this hospital was an oxy-hydrogen lantern demonstration of the chief features of the new hospital.

THE ROYAL VICTORIA HOSPITAL, BOURNEMOUTH.

The Duke of Connaught opened the new wing of this hospital on the 19th inst. An address was presented by the Mayor (Alderman H. Newlyn). His Royal Highness said it had not previously been his good fortune to visit that beautiful and salubrious town; but, like every Englishman, he had heard of it, and congratulated the town on the great strides it was making, and on the popularity it had achieved.

AN OBJECT LESSON IN GYMNASTIC ANATOMY.

ON Monday, the 12th inst., a lecture on Physical Education was delivered in the Gymnasium of the Royal Military Academy, Woolwich, by Surgeon-Major Deane of the Medical Staff. The lecture, which had been previously given at the Royal Military College, Sandhurst, was in itself well worth listening to, but it excited a good deal of popular interest—as far as the cadets were more especially concerned at any rate—owing to the fact that Sandow, the strong man, was in attendance and afforded in his person a practical illustration of what can be done by physical training in an individual naturally of powerful build—in fact, an object lesson in gymnastic anatomy. The proceedings were under the auspices of Colonel Fox, the inspector of gymnasia at Aldershot, and there was, it need scarcely be added, a full attendance. The lecturer commenced by giving various instances in ancient, mediæval and modern times of men who were characterised by their superior development of both physical and mental qualities, ending by citing the present Prime Minister, "as not only a man of powerful intellect but as a hewer of trees." He then went on to explain that nature had given us a certain amount of capital or reserve on which we could draw, and added that this might be more clearly represented by assuming that our personal equation was 1. This reserve force was continually being drawn upon, and could only be maintained by good food, sleep and healthy exercise both of mind and body. He pointed out that physical exertion and exercises undertaken for strengthening and developing the muscles were not without exercising a favourable influence also in developing the mind, and among other illustrations remarked that it was commonly recognised that the more exercise a schoolboy took the more fresh and quick he became in his studies. Be this as it may, however,—and in a sense and within limits it is undoubtedly true—the lecturer went on to say that if England was the most athletic nation it was also the worst physically trained one, for young men took up such games as cricket, football, racquets or running, which collectively were very good indeed in their way, but he pointed out that, taking them separately, they all tended to develop only certain parts of the body. In order to avoid this partial development the first thing to be noticed in studying the human frame is, that it is made by nature to stand erect, from which we might infer that all exercises should be performed in that position on the ground on which we stood, and not above it, as in so many of the exercises provided in gymnasia in England. Sandow's development had been attained by constant and systematic use of the muscles, and especially by the employment of 5 lb. dumb-bells, each exercise being designed to increase the power of some particular muscle or group of muscles. Sandow had modelled his system of training on that in fashion with the Greeks and Romans. He had not employed any modern gymnastic apparatus, but had attained his marvellous muscular development mainly by the use of light dumb-bells in connexion with observations on the anatomical arrangement and disposition of his muscles. The lecturer then asked Sandow to perform certain feats and exercises in illustration of what had been advanced. From this point to the conclusion the proceedings became, in a physiological and anatomical sense, very interesting and instructive, for rarely indeed can the various muscles be seen by being put into action in the living body as definitely and precisely as if they had been laid bare by a dissection in a dead one, as was the case in Sandow's exhibition of them. Stripped to the waist, he was able to demonstrate by different movements how great was the command he had over various muscles. Clasping his hands behind his head he was able to make his biceps rise and fall in time to music. Walking round the audience he displayed various muscles in action as they were separately named. By putting his hand behind his back in such a position as to cause contraction of the deltoid he can raise that muscle to a degree that makes the shoulder look out of all proportion to the rest of his body. The development of the flexor and extensor muscles of the upper extremities, especially of the triceps, was also noteworthy. He can flex or bend his wrist to such an extent that a vertical line drawn from the knuckles will fall on the region of the muscles of the forearm. The intimate physiological connexion between the terminal nerves distributed on the skin and those of the muscles beneath, as well as the contractile power of the muscles themselves, are readily manifested; and the normal reflexes should be capable of being easily demonstrated. Sandow applied the hands of some of the bystanders to the skin over the chest walls and other parts of the trunk of his body, with the result that a young fellow described the sensation as being like that of "moving your hand over corrugated iron." Standing in the centre of the room he showed his maximum and minimum chest measurement. After an efforted expiratory act, aided apparently by the pressure of his arms against the ribs laterally, a difference of twelve inches is caused by deep inspiration and forcible action of the inspiratory muscles. When he fully inflates his chest and "sets" its muscles his arms form an angle of about 40° with his body owing to the size and prominence of the muscles under the arm and towards the back of the shoulder and those of the lateral aspect of the chest. The pectoral, and serrati muscles are very noticeable. Taking two packs of cards together he attempted to tear the two packs—104 cards—in

twain, and after spending about ten minutes in his efforts to do so he succeeded in accomplishing his purpose, affording at the same time an indication of the great muscular strength of the hand and wrist. He failed in doing this at Sandhurst. In order to illustrate the development of the muscles of the back he took a short length of circular indiarubber of about an inch or more in diameter and fitted with handles. This, on being previously passed round the audience, could hardly be stretched by four cadets pulling at each end. Sandow, however, taking hold of the handles and turning his back to the audience, stretched the indiarubber across the back of his neck until his arms were extended at right angles to his body. The action of the muscles of the back caused them to look, as it was remarked, like snakes coiling and uncoiling themselves under his skin. In order to show his weight-lifting power he used a bar-bell weighing 270 lbs., which one of the strongest sergeants of the academy had only succeeded in lifting from the ground by the use of his body as well as his arms. Taking the bar-bell in the centre Sandow allowed it to swing, as it were, by its own weight across his shoulder, from which position he slowly raised it upwards to arm's length above the shoulder. An arrangement was then shown for exercising the adductor muscles of the leg. It consisted of two upright posts and pieces of india-rubber, which are hooked to them and to straps which fasten round the leg just above the knee. The performer sits in a chair between the posts and tries to press the knees together by extending the indiarubber. A cadet who had tried the apparatus could with great effort just do this with three pieces of india-rubber connecting his legs with the posts. Sandow, having attached one more piece of indiarubber on each side, which was all that was available, opened and closed his knees with the utmost ease and without any apparent effort. With the view of showing his gymnastic agility, Sandow very neatly turned a somersault at the close of the performance. His personal equation, as compared with that taken on the previous assumption, may be represented as 50. It is scarcely necessary to add that, with cadets for an audience, Sandow did not lack applause and that there is at present a "great run" on all the light dumb-bells at the Royal Military Academy. The demonstration is, as we have said already, chiefly interesting from an anatomical and physiological point of view, and we have not attempted to discuss the merits of this system from the standpoint of military training and hygiene. The advantages of out-door exercises and sports—in the way of fresh air, emulation, pleasurable excitement and variety—over more systematic and exact methods of physical training need not be stated, for they are obviously on the side of the former.

COLOUR VISION.

THE report presented to the Royal Society by the Committee on Colour Vision is both interesting and important. The committee held no less than thirty meetings and examined more than 500 individuals as to their colour vision. They also took the evidence of various officials connected with marine and railway work, as well as of several surgeons and experts in testing for colour vision. The results of such an exhaustive inquiry are of the highest importance, and seeing that the conclusions at which the committee arrived have as a natural corollary the framing of certain recommendations with reference to the examination of individuals in whom, for efficient work in their various posts, good colour vision is a necessity, it is to be expected that their labours will have important practical results.

The report deals in the first place with the nature of colour vision, and a short and succinct account is given of the Young-Helmholtz theory of colour vision and of that of Hering. The defects in the ordinary forms of colour blindness are described and also those defects which arise in consequence of disease or injury. The dangers from mistaking signals likely to arise from these defects are pointed out; and while it is stated that no direct evidence had come before the committee showing that accidents on land or water have been conclusively traced to such defects, yet the absence of such conclusive evidence does not disprove the high probability that such accidents have really occurred in consequence of such defects. It is evident that every colour-blind person employed in certain capacities afloat and on shore must be a source of public danger, and one significant fact is stated showing the probability—that some years ago at least a considerable number of sailors were employed who were defective in their colour vision. The fact referred to is the existence of colour blindness in 4 per cent. of the orphan children of sailors on training ships. As it is well known that colour blindness is to a large extent hereditary, it may be assumed as more than probable that a considerable number of the fathers of these orphans suffered from this defect; and the unsatisfactory nature of the tests officially adopted by the Board of Trade for colour testing of the Marine service does not lessen this probability. It is, however, satisfactory to find that the different tests employed in the Royal Navy are regarded by the committee as most efficient.

The chief recommendations as stated in the letter of Lord Rayleigh, chairman of the committee, are that the Board of Trade or some central authority should schedule certain employments in the mercantile marine and on railways, the filling of which by persons whose vision is defective, either for colour or form, or who are ignorant of the names of colours, would involve danger to life or property, and that the proper testing of all candidates for such employment should be compulsory. This testing should be entrusted to examiners certificated by the central authority, the test to be used for colour vision being that of Holmgren (the sets of wools to be approved by the central authority), and the tests for form those of Snellen. A certificate of the candidate's colour vision and form vision should be given by the examiner, and lists sent annually to the central authority showing the results and stating the nature of the employments for which examinations were held; while rejected candidates may have the right of appeal to an expert approved by the central authority, whose decision should be final. If, however, a candidate whose colour vision is normal is rejected for naming colours wrongly, it is recommended that he should be allowed to be re-examined after a proper interval of time. Re-examination of persons filling the scheduled employments is suggested every third year or oftener, as well as periodical inspection of the tests and the mode of examination at the different testing stations. The committee also recommended that the coloured lights for ships and for lamp signals on the railway should, as far as possible, be uniform, the colours adopted being those of the green and red sealed pattern glasses of the Royal Navy; and that in the case of judicial inquiries regarding collisions or accidents witnesses giving evidence as to the nature or position of coloured signals or lights should themselves be tested for colour and form vision. The immense importance of the subject is evident, and the practical and thorough nature of the suggested measures must recommend them to everyone.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Margate Urban District.—Margate claims a low death-rate for 1891—namely, 11·4 per 1000 of the permanent population. The zymotic rate was also as low as 0·5 per 1000, and since there were no Margate deaths in the sanatorium, which is outside the area of Margate borough, the record is noteworthy. The hospital was, however, systematically used, 63 patients being sent in. The establishment is by no means a satisfactory one, and Mr. Scatliff hopes that some arrangement will soon be made between the several Isle of Thanet authorities to provide themselves with a more suitable set of hospital buildings. Measles is not notifiable in Margate, but its notification is urged on the ground that school restrictions could be utilised to stay the spread of the disease. In connexion with the current sanitary work it is satisfactory to read that all the remaining wells discoverable on private premises, twenty-seven in number, have been closed.

Leicester Urban District.—The late Dr. Tomkins commenced this report, and it was completed by Mr. H. J. Blakesley, F.R.C.S. During 1891 the general death-rate was

21·2 per 1000. No case of small-pox occurred last year, but amongst the notified diseases were 794 of scarlet fever, 65 of diphtheria, 178 of enteric fever and no less than 238 of erysipelas. With regard to the latter disease, the opinion has more than once been expressed that, as notification is now utilised in some districts, the system leads to the reporting of much that was never intended to be included under the term "erysipelas." Much information as to current work is given in the report. The local circumstances as to water-supply, common lodging-houses, slaughter-houses and other matters are fully gone into. The dairies, bakehouses &c. are considered in some detail and a number of excellent charts and tables are appended. In fact, the volume concludes a series compiled under the late Dr. Tomkins' supervision and care which any borough may well feel proud to issue.

Bacup Urban District.—This report deals almost exclusively with questions of disease and vital statistics; but at its close it is stated that regular inspections are maintained, that scavenging is properly carried out and that the question of sewerage is under discussion. According to Dr. John Brown, the general death-rate during 1891 was 21·5 and the zymotic rate 1·5 per 1000 living.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6125 births and 4046 deaths were registered during the week ending Dec. 17th. The annual rate of mortality in these towns, which had been 18·8 and 19·6 per 1000 in the preceding two weeks, further rose to 20·7 last week. In London the rate was 19·4 per 1000, while it averaged 21·6 in the thirty-two provincial towns. The lowest rates in these towns were 13·5 in Huddersfield, 14·7 in Derby, 15·0 in Portsmouth and 15·5 in Newcastle-upon-Tyne; the highest rates were 27·1 in Sunderland, 27·3 in Brighton, 28·3 in Hull and 35·4 in Bolton. The 4046 deaths included 448 which were referred to the principal zymotic diseases, against numbers increasing from 392 to 444 in the preceding four weeks; of these, 145 resulted from measles, 80 from diphtheria, 80 from whooping-cough, 68 from scarlet fever, 37 from "fever" (principally enteric), 35 from diarrhœa and 3 from small-pox. These diseases caused the lowest death-rates last week in Huddersfield, Wolverhampton, Leeds and Newcastle-upon-Tyne, and the highest rates in Cardiff, Oldham, Bolton, Salford and Brighton. The greatest mortality from measles occurred in West Ham, Manchester, Oldham, Bolton, Hull, Salford and Brighton; from scarlet fever in Bolton, Swansea and Preston; from whooping-cough in Birmingham, Nottingham, Norwich and Salford; and from diarrhœa in Gateshead. The mortality from "fever" showed no marked excess in any of the large towns. The 80 deaths from diphtheria included 59 in London, 3 in Bristol, 3 in Cardiff and 3 in Sheffield. Two fatal cases of small-pox were registered in Oldham and one in London, but not one in any other of the thirty-three large towns; 33 cases of this disease were under treatment in the Metropolitan Asylum Hospitals and not one in the Highgate Small-pox Hospital on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3621, against numbers declining from 4067 to 3772 on the preceding six Saturdays; 286 new cases were admitted during the week, against 302 and 273 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had fallen from 353 to 339 in the preceding three weeks, rose again to 365 last week, but were 121 below the corrected average. The causes of 101, or 2·5 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Croydon, Cardiff, Bradford, Newcastle-upon-Tyne, and in four other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Liverpool, Hull and Gateshead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding five weeks from 20·6 to 24·5 per 1000, further rose to 25·5 during the week ending Dec. 17th, and exceeded by 4·8 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 13·7 in Perth and 16·8 in Paisley to 28·1 in Edinburgh and 43·9 in Leith. The 710 deaths in these towns included 87 which were referred to measles, 18 to scarlet fever, 11 to diarrhœa, 10 to diphtheria, 5 to whooping-cough, 5 to "fever," and not one to small-pox. These 136 deaths were equal to an annual rate of 4·9 per 1000, which exceeded by 2·6 the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 112 and 102 in the preceding two weeks, further declined to 87 last week, of which 26 occurred in Edinburgh and 26 in Glasgow, 17 in Leith, 11 in Dundee and 8 in Aberdeen. The deaths referred to scarlet fever, which had declined from 28 to 13 in the preceding three weeks, rose again to 18 last week, and included 10 in Glasgow, 5 in Leith and 3 in Edinburgh. The fatal cases of diphtheria, which had 2 and 13 in the preceding two weeks, were 10 last week, of which 6 occurred in Glasgow and 2 in Edinburgh. The 5 deaths from "fever" showed a slight further decline from those recorded in recent weeks and included 2 in Edinburgh. Of the 5 fatal cases of whooping-cough 4 occurred in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 134 and 151 in the preceding two weeks, further rose to 198 last week, but were 48 below the number in the corresponding week of last year, when influenza was fatally prevalent. The causes of 58, or more than 8 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased from 22·8 to 24·0 per 1000 in the preceding three weeks, further rose to 24·9 during the week ending Dec. 17th. During the first eleven weeks of the current quarter the death-rate in the city averaged 23·4 per 1000, against 18·0 in London and 23·4 in Edinburgh. The 167 deaths in Dublin during the week under notice showed an increase of 6 upon the number in the preceding week, and included 4 which were referred to "fever," 3 to scarlet fever, 2 to diarrhœa, 1 to diphtheria, and not one either to small-pox, measles or whooping-cough. In all, 10 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1·5 per 1000, the zymotic death-rate during the same period being 2·2 in London and 6·7 in Edinburgh. The deaths referred to different kinds of "fever," which had been 4, 6 and 2 in the preceding three weeks, rose again to 4 last week. The 3 fatal cases of scarlet fever exceeded the number recorded in any recent week. The 2 deaths referred to diarrhœa differed but slightly from recent weekly numbers. The 167 deaths registered in Dublin last week included 21 of infants under one year of age and 47 of persons aged upwards of sixty years; the deaths of infants showed a further decline from those recorded in recent weeks, while those of elderly persons showed a further increase. Eight inquest cases and 4 deaths from violence were registered, and 54, or nearly a third, of the deaths occurred in public institutions. The causes of 13, or nearly 8 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF MEDICAL STAFF.

THE following officers have embarked in the *Malabar* for service in India:—Surgeon-Major Asbury, Surgeon-Captains Swan, Winter and Anderson. The following have embarked in the *Euphrates*:—Surgeon-Captains Birrell and Morse. Surgeon-Captain Morris has proceeded in Medical Charge of drafts to Ceylon. Surgeon-Lieutenant-Colonel Finlay has been placed in charge of the recruiting at Hounslow and Brigade-Surgeon-Lieutenant-Colonel McWalters has taken up duty at Portsmouth on return from a tour of foreign service.

ARMY MEDICAL STAFF.

Surgeon-Major-General J. G. Faught, A.M.S., Principal Medical Officer, Aldershot, having attained the age of sixty, has been placed on retired pay and has accordingly handed over the Medical Administration of the Aldershot Division.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant-Colonel James Keith Anderson, M.D., 2nd Volunteer Battalion, the Black Watch (Royal Highlanders), to be Surgeon-Lieutenant-Colonel, and Surgeon-

Captain Edward Bass Reckitt, 1st Lincolnshire Volunteer Artillery (Western Division, Royal Artillery), to be Surgeon-Major (both dated Dec. 21st, 1892).

INDIA AND INDIAN MEDICAL SERVICE.

Surgeon-Captain J. B. W. Buchanan, Medical Staff, has been transferred from general duty, Mhow District, to general duty, Poona District. Surgeon-Lieutenant-Colonel B. O'Brien, M.D., Civil Surgeon, Agra, on being relieved by Surgeon-Major A. J. Willcocks, will be transferred to the Kheri District. The services of Surgeon-Captain G. B. Irvine, Indian Medical Service (Bengal), have been replaced at the disposal of the Military Department with effect from the date on which he may be relieved of his duties as Officiating Medical Officer of the Meywar Bhil Corps. The services of Surgeon-Captain J. F. Evans, M.B., Bengal Establishment, have been placed at the disposal of the Punjab Government for appointment as Officiating Professor of Chemistry and Toxicology in the Lahore Medical College and Chemical Examiner to the Government of the Punjab during the absence on furlough of Surgeon-Captain D. St. J. D. Grant, or until further orders. Surendra Nath Sirkar, student of the Calcutta Medical College, has been admitted into the Service as an Assistant Surgeon. The services of Third Grade Assistant Surgeon Surendra Nath Sirkar, of the Imperial Establishment, have been placed temporarily at the disposal of the Chief Commissioner, Central Provinces. Surgeon-Major J. Lewtas, M.D., Joint Civil Surgeon of Simla, has been appointed to the Medical Charge of the Army Head-Quarters Staff and establishments remaining at Simla during the winter. Leave has been granted to Brigade-Surgeon-Lieutenant-Colonel H. B. Purves, Civil Surgeon, Howrah (u. p. a.), for two months, without pay; Surgeon-Major K. M. Downie, M.D., 29th Bengal Infantry (p. a.), till April 1st, 1893; Surgeon-Captain D. T. Lane, M.D. (m. c.), for three months; Surgeon-Captain W. H. B. Robinson, 34th Bengal Infantry (m. c.), for three months. The undermentioned Officers have been granted extension of leave:—Surgeon-Major J. C. Marsden, I.M.S., six months (m. c); Lieutenant W. A. Oswald, I.S.C., six months (m. c.). Surgeon-Captain D. St. J. D. Grant, Professor in the Lahore Medical College and Chemical Examiner to the Government of Punjab, has obtained furlough out of India for two years from Nov. 26th, 1892. Surgeon-Major A. J. Willcocks, M.D., Civil Surgeon, on return from furlough will be posted to the Agra District. Assistant Surgeon Phirozsha Palanjee Mullan, L.M. & S., has been placed on general duty. The undermentioned have passed the lower standard examination in Hindustani:—Surgeon-Captains E. S. Marder, E. C. Freeman, H. E. Winter and G. S. McLaughlin, of the Medical Staff. Surgeon-Captains W. R. Edwards, I.M.S., and A. J. Macnab, I.M.S., have passed the lower standard examination in Pushtu.

THE VOLUNTEER OFFICERS' DECORATION.

Among those officers who were presented with this decoration on Monday last by Field-Marshal the Commander-in-Chief were Surgeon-Lieutenant-Colonel Clark of the 4th Middlesex and Surgeon-Lieutenant-Colonel Norton, M.S.C.

THE FALL IN THE VALUE OF SILVER.

There is probably no reader of THE LANCET in India who is not more concerned with the depressed state of the silver currency than with any other question at the present time, for it seriously affects all the civil servants and military and medical officers serving in that country. The question is a really serious and urgent one and Mr. Gladstone will be compelled to deal with the problem somehow as soon as Parliament meets. If a further fall takes place in the value of silver the difficulties of the Indian Government will be seriously increased and it will not be at all easy to provide for the interest on loans and for the salaries of Indian officials—political, civil and military. The International Conference at Brussels has been foiled in its attempt to deal with the question and the British Government will certainly have to take it up in Parliament. In the meantime, the loss in the aggregate to medical officers and others serving in India who have to send money home to their families is very considerable.

THE PHYSIQUE OF YOUNG OFFICERS.

We would call attention to the account of an interesting demonstration in the way of physical training that has recently been afforded to the cadets of the Royal Military College, Sandhurst, and the Royal Military Academy, Woolwich. No doubt a great deal can be effected by a systematic course of training and the use of light dumb-bells in strengthening and developing the physique—especially in the case of young men. Out-of-door games will naturally be preferred to in-door exercises and drills and they certainly have the hygienic advantage of fresh air. If these games be severally analysed, however, it will be recognised that for the most part each of them only exercises and strengthens some particular portion of the body and its muscles. The boys of our large schools and young men generally who join in athletic sports rarely, however, confine themselves entirely to one kind, but take part in a variety of games. In so far as physical exercises bring about the *mens sana in corpore sano*, they tend to mental as well as physical robustness; and by inducing a healthy play of the animal functions generally, and of the circulation of the blood in particular, they give rise to a fresh, clear and prompt intellect; but more cannot be got out of the animal machine than goes into it, and if the energy goes off in one direction it will not in another, and a man can hardly undergo great physical and mental work at one and the same time. Notwithstanding much that is said at present it seems to us pretty clear that, speaking generally, the physique of our young officers is very good and quite equal to what it was. In any one of the service clubs in London, for example, a number of young men may be seen of healthy aspect and fine physique. It must be remembered, too, that a man of small but wiry frame frequently displays great energy, activity and endurance, and that men of this type, at the end of an active day's hunting or shooting, or after a march, will often manifest fewer signs of fatigue than others of larger mould.

SIR AUCKLAND COLVIN.

There have probably been few men who, on relinquishing high civil office in an Indian province, can look back on their past record with less misgiving than Sir Auckland Colvin; and his work has mainly been in those directions in which sanitarians and members of the medical profession are most interested. He has done all he could in the way of social and humanitarian questions, in organising sanitary measures for the towns and villages of the North-western Provinces, in inaugurating waterworks and drainage schemes for waterlogged and fever-stricken districts, in getting hospitals erected and in pushing forward various practical reforms for improving the public health of the province over which he presided. Sir Auckland Colvin was always accessible and could speak to the natives in their own language with perfect fluency; he knew his own mind and also how to express it in terse English, and he had plenty of initiative and energy. His departure from India at the close of his official career is justly regarded as a matter of regret in that country.

THE TREATMENT OF YELLOW FEVER BY COLD.

A military surgeon of experience remarked some years ago that in the event of the occurrence of an outbreak of yellow fever on shipboard the best course was to put the ship's head to the northward and to steer there; and he added that if he were himself a sufferer from that disease, he should like to be put into the ice-house, if the ship had one, until he got there. It seems that a Spanish practitioner residing in the island of Cuba has made some experiments in this direction on yellow fever patients by putting them inside a metal-lined box with double walls and top, the intervals between which are filled with ice, by which means the temperature of the inside air is of course greatly reduced and rendered very damp at the same time. Dr. Garcia, who is the experimenter in question, is, according to the *Daily News* in Havana, prosecuting his investigations.

THE EFFECT OF MODERN RIFLE FIRE.

Surgeon-Captain Perry Marsh, Medical Staff, in a communication to the *Army and Navy Gazette* of last week, calls attention to the fact that the results of the experiments made by Veterinary-Captain Smith on the bodies of horses with the Lee-Metford rifle bullets are substantially in accord with those which had been already published by himself. There certainly does not appear much room for doubt that to Surgeon-Captain Perry Marsh the credit is due for having first demonstrated the facts. This officer states that he has now collected the reports of a large number of cases in which men have been wounded by the Lee-Metford missile. "My series embraces cases of wounds of various parts of the body at ranges varying from a few inches up to 3000 yards. In not a single instance is there any evidence of extensive disorganisation of the parts by the missile, unless considerable resistance had been offered to its passage by a large compact bone. In all soft parts such as muscle, large

organs and also in expanded cancellous bone. nothing more than a mere clean-cut key-hole wound has resulted. The extent of damage produced entirely depends, as I have repeatedly pointed out, upon the amount of resistance which the bullet meets in its course. For this reason experiments on horses are somewhat unreliable guides in assisting us to form an opinion as to what the destructive effects of the missile are when striking the human body. It should be borne in mind that the large heavy bones of the horse offer a very different degree of resistance to penetration to that offered by the smaller apd lighter ones of the human body. Disregard of this fact appears to have been the chief cause in leading Professor Smith astray in his conclusions regarding the damage done by the Lee-Metford bullet when striking the human body at short ranges."

THE AGE AND PHYSIQUE OF OUR RECRUITS.

The current number of the *United Service Magazine* contains a contribution under this title by Brigade-Surgeon Staples which many of our readers will peruse with interest in connexion with the late report of Lord Wantage's Committee and the various articles and letters that have appeared on the subject. On the assembly of Parliament the attention of the new Secretary for War, Mr. Campbell-Bannerman, will no doubt be directed to this matter.

Correspondence.

"Audi alteram partem."

THE LATE DR. WALSHE.

To the Editors of THE LANCET.

SIRS,—The labours of Walshe, and even his methods, belong to a past generation. No one in these days will attempt to rival him in the accuracy or the fullness of his descriptions of the physical signs of disease. Yet at this moment it cannot be without interest to look back some forty years and compare his teaching with ours. In 1854 there appeared the second and, as some think, the best edition of Walshe's "Diseases of the Lungs and Heart," and for precision, lucidity and finish, for concentration without obscurity and a severity of phrase hardly short of pedantry, the book is unique. It appealed especially in its day to thoughtful men, young to practice, who had already discovered a certain vagueness in medicine and were weary of that facile and slipshod style of composition of which Walshe never wrote one line. In numbered paragraphs, section and subsection, with frequent reference to clinical authority, all of his own collecting, Walshe put forth a body of facts, the grammar of his science in such fashion that the book seemed suited rather to be learnt than read. To many a student of thirty years ago Walshe was not merely a text-book, it was his bible. With such a method of work it is no wonder that when Walshe turned from the study of disease in its purely physical aspects, the point of view that alone attracted him, and came to more general discourse as to the look and the manner of his patients his cunning deserted him and he became insipid and uninteresting. He hated general expressions and was so calculating in the saving of words as to write "facies" (p. 403) instead of "face," thinking that the Latin word carried a fuller meaning and might repay the expenditure of two extra letters. Thus Walshe failed where his great contemporary Sir Thomas Watson was supreme. It is curious to note the different bent of the two and the preference of each for his own department. Watson is always easy and picturesque, but the nice description of auscultatory sounds troubled him. "It is a hard thing," he says, speaking of bronchophony and bronchial breathing, "to describe these things in words. Three minutes at the bedside of a patient will put you in possession of them for ever." Three minutes where Walshe expends many pages of small type, while he devotes much time to a sign so comparatively unimportant as ægophony, that sound which "does not appear to traverse the stethoscope, but rather to flutter tremulously about the applied end." And when all is said, the author seems still uneasy lest his description should be too little hedged about with qualification and exception. "I long believed," he writes regretfully, "fine crepitation to be distinctive of pneumonia, but unfortunately in rare instances (I have seen two such within the last year) pure œdema of the lung does give crepitant rhonchus in no point distinguishable from that of pneumonia."

Yet for all his severity the serious reader (and what other could he possibly attract?) cannot fail to see that Walshe has feelings and passions, perhaps even prejudices. like other men. This is shown in his treatment of contemporary writers on his own subject. He differs from Stokes and from Sibson occasionally and with much respect, from Skoda more often and not unwillingly, from Hope always and with joy. So, too, in his phraseology. Careful and well weighed as is every word, there are some words of which his use is peculiar. Thus he habitually writes "infinitely" as though it were the equivalent of "very" and speaks of certain phenomena as "infinitely rare" when his meaning is that they are very uncommon. But it is not for small criticism such as this that I now write. It is rather to point out that the physical examination of the heart and lungs, as Walshe taught and practised it, is hardly understood now in his sense. It was a passion with him, like his love of music and akin to it. It may even be granted that he refined overmuch and that his standard of health was too strict and narrow. That is not the fear now. The art of auscultation is growing old and has passed the age of enthusiasm. But we may well hope that in his declining years Walshe was spared the knowledge that is now taught in some quarters that the terms "bronchial" and "tubular" are much the same, and that a single adjective apiece may suffice to describe the several categories of "crepitant rhonchus."—I am, Sirs, yours faithfully,

Wimpole street, Dec. 22nd, 1892. OCTAVIUS STURGES.

NASAL DOUCHE OR NASAL SYRINGE.

To the Editors of THE LANCET.

SIRS,—In the article by Dr. Barr on "Treatment of the Nose and Throat as a source of Middle-Ear Disease: Precautionary Suggestion," every possibility of exciting inflammation within the middle ear is carefully dealt with, and finally in the use of the nasal douche and nasal syringe no less than eight precautionary suggestions are given in great detail. I beg to add one suggestion which will so far as any danger is concerned to the middle ear from nasal douche or nasal syringe embrace all. It is that the nasal douche should never be used, and the patient or nurse should be personally instructed how to employ the nasal syringe effectually and harmlessly. This rule I have rigidly observed since 1874 without a single accident, and I have seldom passed a day when at work without ordering a nasal syringe. I have also endeavoured to enforce this rule in every edition of "Diseases and Injuries of the Ear" and in "Holmes's System of Surgery." It has been necessary to do this, as I am confident from the number of cases I have seen in which the douche has induced inflammation of the middle ear that it is unsafe to trust it in the hands of patients, however carefully instructions as to its use may be given. In again drawing attention to this subject and treating it in so exhaustive a manner, Dr. Barr's article cannot fail to be of great service to many who have not had the opportunities (which he has) of observing the dangers to which he refers. It is altogether futile for anyone to quote in defence of the douche that numbers of persons habitually use it with impunity. This in no sense does away with the undoubted fact that many eventually injure their ears with it. Thus it differs in regard to safety from a properly constructed nasal syringe.

I am, Sirs, yours faithfully,

London, Dec. 20th, 1892. W. B. DALBY.

THE PREVENTION OF CHOLERA IN ENGLAND.

To the Editors of THE LANCET.

SIRS,—THE LANCET of Dec. 17th contains a brief and substantially accurate report of a paper which I read on Nov. 21st before the Incorporated Society of Medical Officers of Health. The report, however, states that I questioned whether the "abandonment of quarantine was a wise policy."

I should be sorry for your readers to suppose that I intended to question the wisdom of the abandonment of quarantine in England, and I ask you to allow me to quote the words I used:—"The practical objection to quarantine is that it cannot be effectually carried out. Even in countries which have little commercial spirit, and amongst the inhabitants of which there is no markedly hostile protest against the great loss of time which quarantine naturally causes, it has been found that the system is practically of little or no value in the prevention of the spread of such a disease as cholera. There is little, therefore, to commend the system to us, and the President of the Local Government Board was decidedly right in his decision to decline to adopt it this year in the case of ships coming from infected ports. The wisdom of this decision is, I think, generally admitted. But, if it were not admitted, let us consider for a minute what would happen if a system of quarantine were adopted. This year, it must be remembered, the infected ports were those of Russia and of Germany. Let us suppose that next year those of France were affected. What would happen to our commerce if all communication were cut off from French ports and if passengers from Calais and Boulogne were quarantined? Practically quarantine could not be effectively carried out."

I am, Sirs, yours faithfully,

York-st., Portman-sq., Dec. 19th, 1892. RICHARD SISLEY.

"TREATMENT OF OPHTHALMIA AMONGST THE CHILDREN OF THE POOR."

To the Editors of THE LANCET.

SIRS,—My attention has been called to Dr. Jacob's letter in your issue of the 10th inst. That gentleman appears to labour under a complete misapprehension with regard to the steps which have been taken to deal with ophthalmia in some of the London parochial schools. Before entering his "protest" against (what he is pleased to term) "the fashionable system of boxing up a crowd of cachectic children in a special isolation hospital," Dr. Jacob should have made sure of his facts. The confusion in his mind seems to have arisen from the assumption that isolation involves a kind of imprisonment. Since the isolation carried out at the Norwood and Hanwell schools was confided to my hands, I may be permitted to explain to Dr. Jacob the real facts of the case. Most reasonable persons will admit that to allow children with a contagious disease like ophthalmia to have washing and sleeping arrangements in common with unaffected children would be to fly in the face of Providence and court the danger of an extensive epidemic. It may reassure Dr. Jacob to learn, however, that as part of the system, special arrangements have been made for a large amount of outdoor exercise at Hanwell. Every child, for instance, is compelled to walk for two hours each day beyond the precincts of the ophthalmic school. Further, football is compulsory for the boys, while hockey is played energetically by the girls. Dr. Jacob will therefore see that a course of open-air treatment is carried out systematically at Hanwell. The "farinaceous dietary" he so strongly recommends is replaced by a liberal diet-table arranged on a somewhat more comprehensive and scientific basis. So far, then, the ground is to a certain extent common between us. As to the "little local treatment to the conjunctiva," of which Dr. Jacob speaks, I can only say that I have found after a somewhat lengthened experience of the disease that months or even years of systematic care are required to effect a cure in cases of severe trachoma.

Dr. Jacob takes it for granted that affected children are "kept under subjection to all the paraphernalia of green shades, darkened windows, compress bandages &c." Dr. Jacob may be perhaps astonished to learn that no dark room exists at Hanwell, and that the employment of even a shade for the eyes is an event of some rarity. As for compress bandages, such appliances are most unsuited for cases of trachoma, and indeed for conjunctival affections in general. The statement made by Dr. Jacob, that "infectious granular ophthalmia is, *par excellence*, the disease of Ireland," will not surprise English readers who have perused his views on the treatment of that affection.—I am, Sirs, yours faithfully,

SYDNEY STEPHENSON, M.B.Edin. &c.

Welbeck-street, W., Dec. 20th, 1892.

"EXPERIMENTS ON ANIMALS."

To the Editors of THE LANCET.

SIRS,—The question of whether or not the peritoneum of the *human* being is sensitive or not is not one which can be settled by experiments on *animals*; and if my views prove to be correct it only affords another illustration of the misleading nature of the experiments I condemn. If there is an error on my part, it of course must be in my erroneous interpretation of phenomena yielded to me by 3300 human peritoneal cavities. But I am collecting evidence on the subject from other surgeons, and I shall send you the conclusions summarised from that evidence when it is complete. I confess at present as I read Dr. Sherrington's letter I can hardly believe that my eyes convey the true meaning of his words, so absurd do they seem to me.

I am, Sirs, yours faithfully,

The Crescent, Birmingham, Dec. 18th, 1892. LAWSON TAIT.

SUBCUTANEOUS SUTURE OF THE PATELLA.

To the Editors of THE LANCET.

SIRS,—Please permit me to correct a statement in the account of my instruments for bone suture in your issue of Dec. 10th. Dr. D. W. Aitken's instrument described in my paper as a long bradawl perforated at the end is really a tubular bradawl.[1] The perforated instrument was originally described by Ceci of Genoa in the *Deutsche Zeitschrift für Chirurgie*, Bd. xxiii., p. 285. A brief extract of this paper in the *Centralblatt für Chirurgie* for Aug. 14th, 1886, treats it with unmerited contempt and gives a wrong reference to it—viz., Bd. xxxii. instead of Bd. xxxiii.

I am, Sirs, yours truly,

C. B. KEETLEY, F.R.C.S.Eng.

Grosvenor-street, W., Dec. 21st, 1892.

NITROUS OXIDE GAS.

To the Editors of THE LANCET.

SIRS,—It is in the experience of most if not all administrators of nitrous oxide gas to find the gas obstructed during its exit from the bottle, and on the tap being further unscrewed for the gas to rush out sometimes to an uncontrollable extent, blowing off or bursting the india-rubber connexion, causing great annoyance to the administrator and serious alarm to the patient. This obstruction is said to occur when the bottles are in the horizontal position and to prevent it taking place, the late Dr. Sheppard, anæsthetist to Guy's Hospital Dental School, invented an ingenious contrivance. As, however, the cause of this obstruction is not generally known and so easily prevented I venture to state the reason and remedy for it. It is due entirely to a small quantity of water accumulating from several fillings of the bottles the result either of the condensation of moisture from improperly dried gas or introduced in the process of pumping the gas into the bottles. When this water freezes on account of the absorption of heat which takes place during the changing of the liquid gas into the gaseous condition, it forms an effectual barrier to the outward flow of the gas which may suddenly yield as the tap of the bottle is further unscrewed. The remedy is a simple one and is in the hands of the manufacturers of the gas or of those administrators who have their own bottles refilled—namely, taking the precaution to have the taps of empty bottles removed and the water shaken out. I have adopted this plan for two years, during which time I have experienced no inconvenience in administering nitrous oxide gas from bottles placed in the horizontal position.

I am, Sirs, yours truly,

S. EDWARD PEDLEY, M.R.C.S., L.R.C.P. Lond.,
Anæsthetist to the National Dental Hospital.

The Terrace, Camberwell, S.E., Dec. 19th, 1892.

"ON THE DIAGNOSIS OF THE DIFFERENT FORMS OF PROSTATIC ENLARGEMENT."

To the Editors of THE LANCET.

SIRS,—It is allowable to the profession, I presume, to succinctly criticise any article dealing with matters of importance in your valuable journal; at least such have been

[1] Brit. Med. Jour., July 23rd, 1892.

the traditions of THE LANCET. Mr. Mansell Moullin, in writing on the diagnosis of prostatic enlargement, does not as clearly express his meaning as some of his readers would desire, nor does he at all satisfy those who seek for novel or efficient solutions of difficulties in the means he recommends. All his dissertations appear at last to bear upon an invention which, were its practical utility equal to the theory of its *rationale*, I for one would feel grateful not envious, enlightened not puzzled. "With it the prostatic urethra can be mapped out with perfect accuracy," "and ..... owing to the difference in the resistance presented by the walls, the nature of the growth can be ascertained whether it is soft, nodular" &c. How, may I ask, can such possibly be with an extent of accuracy pointing to utility? We have, firstly, apparently a bulky instrument which, even when closed, is in itself capable of obliterating pro tem. these irregularities it is meant to differentiate, and the expanding sides of the frame of which can only at best (even granting that they can be much expanded) indicate to an extent the diameters of the canal, but not at all unilateral deviation or distinguish anterior from posterior encroachment. Secondly, how can the consistence of the enlargement be told by such means with anything like accuracy? No, Sirs, an instrument which carries out what is really wanted must be based on different principles.

You did me the honour of publishing a description of an automatic urethrometer in your issue of Oct. 10th, 1891, which instrument was lent in June last to Mr. Moullin at his request, and I challenge him now to say it has not given him the ideas which he now tries to apply to the instrument he describes. My perfected instrument, I submit, when bent especially, will, in its withdrawal from the bladder, carry out scientifically the desiderata dwelt upon by Mr. Moullin; for not only will it work automatically, and register to a nicety the resistance of the prostatic walls, but it will draw an outline of their contour.

Mr. Moullin has rewarded me with but scant courtesy for the trouble I took in taking him the instrument, though he promised me "full credit." Nevertheless, I would not now trespass on your space were his instrument to fulfil what is wanted. Finally, will you allow me to suggest that the only manœuvres of any worth, in my humble opinion, are those of Mercier, and were the beak of his sound hinged on a pervious shaft carrying a wire attached to the beak and in obedience to the operator's hand, whilst recording the extension of the beak, we would, I think, be nearer what is required.

I am, Sirs, your obedient servant,

Crouch-end, Dec. 20th, 1892. JAMES MACMUNN.

THE SENATOR JAMES MOLESCHOTT.

(FROM OUR SPECIAL CORRESPONDENT.)

CROWDED to its utmost capacity with students, with medical practitioners and consultants, with the teaching staff of the various schools and institutions, with Senators and members of Parliament and with the fair sex, the Aula Magna of the Roman University offered an imposing spectacle when, at 11.15 A.M. to-day, the Rector, accompanied by Professor Moleschott, the Minister of Public Instruction (Signor Martini), the President of the Chamber of Deputies (Signor Zanardelli), the Dutch, Bavarian and Swiss Ministers, the Prefect, and a long train of the Senatus Academicus and eminent citizens entered and took their seats on the raised platform. To the left of Signor Martini, who presided, stood on a pedestal a very fine bust in bronze of the hero of the day, the formal presentation of which on his having completed his seventieth year was the occasion of the gathering. The sculptor is Ettore Ferrari, and the highly intellectual features of his subject were universally admired as having been given with a fidelity and a life-like animation worthy of both.

When the applause, often repeated, had subsided, Professor Toscani rose and in well-chosen language, in the name of the Faculty of Medicine, presented Professor Moleschott with a parchment signed by 400 brethren in science and teaching, at the same time handing over to him the bust and expressing the hope that it will long adorn the hall of the institute in which he has taught so indefatigably and so well. This proceeding was followed by the presentation, through Professor Durante and on the part of the Accademia Medica di Roma, of another parchment signed by 200 working practitioners and consultants, to testify their appreciation of Moleschott's scientific work. The third to rise was the Rector of the University, who spoke as an academic colleague in a similar sense, and the fourth was Professor Paliani, Director-General of Hygiène for the kingdom of Italy, a former pupil of Moleschott at Turin, whose medical faculty and accademia he represented. His speech, even more eloquent than those of his precursors, was loudly applauded as he resumed his seat after presenting to Moleschott a numerously signed parchment from the practitioners and teachers of the sub-Alpine capital. After him came M. de Westemberg, Minister of Holland at the Court of the Quirinal, whose discourse was redolent of patriotic pride in the honours done to his distinguished countryman and who concluded by presenting, in the name of the "Dutch Committee for the Moleschott Jubilee," an illuminated address and two fine works of art by his compatriots, Joseph Isdrael and Alma Tadema. It was now the turn of Professor Colassanti, whose task it was to represent the Dutch Academy of Sciences, the University of Amsterdam, the Dutch Medical Association, the Utrecht Society for the Promotion of Science and Art, the Society of Dutch Rationalists, entitled "De Dageraad," the Institute of Experimental Physiology of Naples and other bodies, and who presented in their name, as well as in those of numerous individuals, a long array of letters and telegrams of congratulation along with a parchment of the Senatus Academicus of Amsterdam, the diploma of honorary membership of the Dutch Medical Association, and a volume published in Moleschott's honour by the "De Dageraad" Society of Rationalists, containing the autographs of many distinguished *savants* and men of letters, Italian and foreign. Finally, His Excellency Signor Martini, in chaste yet glowing terms, congratulated Professor Moleschott on the auspicious day—a day to which the Italian Government could not remain indifferent—and, on the part of King Humbert, presented him with the *insignia* of the Order of Civil Merit of Savoy.

Prolonged cheering from the upstanding assemblage greeted Professor Moleschott as he rose to make his acknowledgments. In a strain of the manliest, most purely scientific, modesty he dwelt on the magnificent honours that had been conferred upon him, and sought their explanation in the single-hearted devotion to truth that united him to his brother investigators and teachers throughout the world. In a passage of splendid eloquence he pictured himself and his fellow-workers on the great gulf stream of research, following in the deep wake of a mighty vessel—that of inductive science—whose cargo they were ever enriching, but whose port of debarkation they were destined never to see. This image he elaborated with fine effect, till, by an artistic transition, he passed to his own chequered career. In Holland he had imbibed with his mother's milk the love of liberty. His father was a freethinker in the domain of science and instilled into his young mind a passion for work which soon found its highest fruition in daily recurring investigation in the laboratory and the pathological theatre. The lessons he had acquired at the feet of the great physiological chemist, Mulder, he followed up in Germany by acquisitions made in her schools—acquisitions confirmed or modified by inter-communication—aye, even animated controversy—with such pioneers of science as Liebig. It was in Germany that he gained the gentle consort who for twenty years shared his fortunes, his sorrows and his joys, and here he made touching allusion to her tragic and untimely end—self-destruction in a sudden access of mania—in language which went straight to the heart of his audience. His loyalty to truth and to freedom of discussion cost him his chair at Heidelberg; but that loss was made up by Switzerland, the refuge of the patriot, as all Italians understood, which gave him hospitality in the great medical school of Zurich. A few years in the Helvetian Republic enhanced the love he had always borne her as a stranger till, at the instance of the mightiest diplomatist and statesman of the nineteenth century, Camillo Benso di Cavour, he was brought to Turin to throw in his lot with the Italian resurrection and to strengthen her growing energies on the scientific side. Able Ministers of State like Quintino Sella, who asked the Chamber of Deputies to grant—"di urgenza"—the Italian citizenship to the Dutch physiologist, or like de Sanctis, who, after the splendid results of that same physiologist's teaching in the sub-

Alpine capital, transferred him to the University of Rome, vied with men of science and men of letters to make his residence and work in Italy ever more pleasant and more effective, till his citizenship in the land of his adoption was crowned by his having been made one of the Conscript Fathers of the Legislature. These and such-like details, familiar to the student of contemporary scientific history, Professor Moleschott referred to in exquisite Italian idiom, winning the mind and soul as well as the heart of his audience by the manifest care and success with which he had mastered their beautiful language and their noble literature, and confirming by the best of all title-deeds—those of intellectual and moral naturalisation—his right to say of himself, "Civis Romanus Sum."

Seldom have I assisted at a more interesting, a more gratifying demonstration—not the least reassuring feature of which was the splendid physical and mental vigour of its hero, giving earnest of continued work in the laboratory and chair of physiology—for the advancement of medical science and for the rehabilitation of the profession in Italy. At the close of the proceedings the audience, one by one, saluted the "modesto soldato del progresso civile," as he termed himself, on its way out; while all through the day he continued to receive congratulations by telegraph from the chief medical schools of the peninsula, such as Turin, Modena and Bologna.

Rome, Dec. 16th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Increase of Small-pox.

IT would appear that after all Manchester is not to escape without closer acquaintance with the scourge which has so long been prevalent in many of the neighbouring towns of Lancashire and Yorkshire. The weekly health return just issued by the Corporation indicates that within the last three weeks more than 40 fresh cases of small-pox have been reported in Manchester, and I hear from another source that on one occasion this week as many as 10 cases were sent to Monsall within a period of twenty-four hours. The distribution of small-pox infection seems to be very general; it is by no means confined to one or two areas, but cases are cropping up, now in one district, now in another, so that a general feeling of uneasiness is beginning to prevail as to whether or not the disease is about to assume epidemic proportions throughout the city generally and thus to become unmanageable. At the monthly meeting of the Manchester Infirmary Board, held on the 19th inst., the subject of small-pox prevalence was specially referred to. Mr. Alfred Simpson, chairman of the Monsall Committee, in moving the adoption of the minutes, said he regretted to have to say that there had been for several weeks past a steady increase in the number of patients received at Monsall Hospital suffering from small-pox. At the present time there were 37 persons in hospital suffering from that disease. The week before 12 were received, last week the admissions were 15, and already this week several others had been admitted. The gravity of the case arose from the fact that 14 out of the 15 patients received last week came from widely separated districts of Manchester, from which it was evident that they would for some time to come have to provide for a distinct epidemic of small-pox. The permanent accommodation at Monsall, from present appearances, would very shortly be exhausted, and it would be necessary to resort to temporary accommodation for any considerable number of cases in excess of the number they now had there. He also added that he had heard with regret from the Hospital Medical Staff the opinion that the population of Manchester at the present time was not well protected from small-pox by vaccination and re-vaccination. Having regard to existing circumstances and to recent experiences in Warrington and elsewhere the action of the Council at their last meeting is greatly to be regretted. The Sanitary Committee, presumably at the instance of the medical officer of health, had carefully elaborated a scheme for the erection of a small-pox hospital on vacant land adjacent to but quite isolated from the present fever hospital at Monsall. The committee presented a very full report giving the reasons which had led them to bring forward their scheme and urging the necessity which undoubtedly existed for promptitude in making provision for the proper isolation of small-pox. According to local newspaper reports the case advanced by the opposition against the scheme of the committee was a peculiarly weak one; but inasmuch as Monsal is within the district of Newton Heath, an opportunity was afforded to the discontents of that township to make it a grievance that all the small-pox in the city should be sent into their district, some of the representatives going the length of suggesting that each of the several townships of the city—some sixteen in number—should establish a separate hospital for infectious disease in their own districts. It is more than probable that had the debate on the report been kept within reasonable limits, the committee's recommendation would have been confirmed. As it was, however, the discussion was prolonged until after dark, by which time a large portion of the Council had retired, so that when at length the division was taken the proposal of the committee was rejected by a bare majority, the whole matter being referred to the committee for "further consideration and report" some time in January next. From the report of the medical officer of health, which was circulated at the Council meeting, it appears that small-pox is still being treated at Monsall in a couple of pavilions which are in close proximity to the fever wards. The fear though is that infection may spread, as it almost assuredly will do, from the small-pox wards to the other portions of the hospital; in which case both the hospital authorities and the Corporation would incur very serious responsibility, especially since the danger of their present practice has been duly pointed out to them by their medical advisers.

The Unemployed and Local Distress.

There is no doubt that since the advent of somewhat severe weather there has been a good deal of distress in certain districts of the city, and this has been rendered more acute because of the cotton operatives' strike, which unfortunately has not yet come to an end. Most of the boards of guardians and local boards have held meetings to consider the question, but up to the present time there does not appear to have occurred any unusual amount of destitution in consequence of the stoppage of out-door work. The return of comparatively mild weather during the last week has of course greatly improved the circumstances of that portion of the unemployed who are really desirous to obtain work.

Dec. 20th, 1892.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

The Newcastle Royal Infirmary and its Management.

A CORRESPONDENCE of a somewhat acrimonious nature has been going on for some time as to the management of the Royal Infirmary. The fact is the infirmary has at present an advance balance of about £2000, which to some minds would show that it is doing a very large amount of work, but others, acting the part of candid friends, are attacking its management by anonymous letters in our local papers. Now, I am not defending the management of the institution, but I do say that these letters are not fair. If the writers have faults to find with the infirmary let them find it in an open way, declare themselves at the many opportunities presented at the Governors' meeting or openly in the press and then we should know how much weight to attach to their opinions. Above all they should be sure of their facts. This irresponsible letter-writing is calculated to injure a noble institution. It is, however, pleasant to see that one of our large coal companies has sent a donation of £150 and others have followed its example.

Ambulance Work in the North.

The annual meeting of the Middlesbrough centre of the St. John Ambulance Association was held last week. The report showed that, owing to the trade depression in the district, less work had been done during the year than usual; still 258 members had attended a full course of instruction. During the eleven years that they had been working there had been 185 classes with about 5550 members, of whom 4534 had qualified for examination. Surgeon-Major Hutton had also examined a class of seventy-seven at Wynyard Park, the seat of Lord Londonderry, the classes being mostly composed of members of the household. Lady Londonderry and Lady Helen Stewart, amongst others, submitted themselves to examination and highly satisfied the examiner. At Darlington also the members of the Railway

Employés Ambulance Class, instructed by Drs. Middlemiss and Petter, were examined by Dr. Ellerton, of the St. John Ambulance Association, who expressed himself as highly pleased with the results, especially in the bandaging-stretcher exercise.

Hospital Saturday at West Hartlepool.

On Saturday last the usual hospital collection was made at West Hartlepool. It is said that the box collection did not exceed the expectations of the committee, but on the other hand Dr. Gourley has had forwarded to him several handsome donations in connexion with the scheme.

How Infectious Diseases are Spread.

At the meeting of the Chester-le-street Rural Sanitary Authority a case of small-pox was reported. The man had died in the workhouse hospital, having come from Northallerton with a wife and child, who were also suffering from the disease. Small-pox, it is known, has been prevalent in the neighbourhood of Northallerton lately. In connexion with this matter it may be noted that last week a raid was made by the police on tramps and nondescripts found sleeping in coke-yards and cinder-ovens in the county of Durham owing to the frequent fatalities arising therefrom. About sixty-seven tramps are reported to have been arrested. They were brought before a special police court and although a few were discharged the majority were sentenced to imprisonment. They were described as being in a dreadful state from dirt and disease and apparently had not been washed for years. There were two negroes amongst the number.

A White Seal on the Northumbrian Coast.

A splendid specimen of the white seal was caught last week in Newbiggin Bay. It was first observed, by some gentlemen who were shooting, making efforts to get out to sea, but it was prevented from doing so by a fisherman stunning it by a stone. It was taken to the village and with difficulty kept alive for a few days. It measured nearly five feet in length and weighed nearly 1 cwt.

Presentation to Dr. Smellie.

Dr. Smellie of Jarrow has received a presentation at a meeting presided over by the Mayor of Jarrow. Dr. Smellie has been many years resident in Jarrow, but has received an official appointment in Wigtonshire.

Memorial to the late Dr. Maclagan of Berwick.

The Berwick authority have agreed to the erection of a memorial to the late Dr. Maclagan in the High-street, Berwick.

Newcastle-on-Tyne, Dec. 21st.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Draft Ordinances by the Scottish Universities Commission.

DRAFT ordinances bearing in an important manner upon the Faculty of Medicine in the Scottish Universities have just been issued by the Commission. One of these deals with pensions to principals and professors. After ten years' service an annual allowance is granted of twenty-sixtieths of the amount of salary of his office. After ten years one-sixtieth is added for each additional year of service. In calculating the pension, £900 is to be held as the maximum salary of either a principal or professor. The University Court is given power to transfer chairs from one faculty to another and to determine to which faculty new chairs shall belong. The following are briefly the regulations as to the application of Parliamentary grants, as to salaries, and for the institution of a fee fund &c. The Universities of Glasgow, Aberdeen and Edinburgh receive as their respective shares of the annual sum of £42,000, being the Parliamentary grant under the Act of 1889:—Glasgow, £12,180; Aberdeen, £8400; Edinburgh, £15,120. And of the annual sum of £30,000 constituting the Parliamentary grant under the Act of 1892, Glasgow receives £8700, Aberdeen £6000 and Edinburgh £10,800. These sums are ordained to be paid to the University Court of each University. The whole fees payable to the professors in any of the Universities shall be drawn by the University Court and are to be collected in such manner as the Court may from time to time appoint, and shall constitute a fee fund, and the fees so collected are to be kept in a separate account known as the "fee fund account." It shall also be in the power of the Court to fix from time to time the fees in any of the classes. The sums payable to the professors other than the fees are ordained to be kept in a separate account, to be called the "salaries account." These include endowments and sums paid out of public moneys. The professors and their successors are to receive annually out of the salaries account the respective sums paid into it, and are also to receive from the fee fund such sum as shall bring their salaries in each case up to the amount given in a separate schedule and referred to further on. In the event of a deficiency in the fee fund in any year, the payment shall be diminished proportionally to the normal salary of each professor. In no case is the total salary of a professor to fall below the sum in the second column as under; and if the fee fund is insufficient to make good the minimum salary, the deficiency is to be supplied out of the other funds of the University. Professors appointed to chairs which may hereafter be instituted by the University Court shall receive such salaries and shall have such interest in the fee fund as may be fixed by the Court when the chairs are instituted. Notwithstanding the foregoing provisions, the professors in the University of Edinburgh are during their tenure of office to receive out of the fee fund the full amount of fees drawn from their classes in each year, but under deduction in each case of such sum as may seem to the Court to be just and equitable, not exceeding the average of the sums paid by the professor for the salaries of assistants and class expenses. The medical professors of Glasgow and Aberdeen Universities are to receive during their tenure of office a sum equal to 90 per cent. of the net emoluments of their office, estimated on an average of the five years immediately preceding. Provision is also made for the application of the revenues of the University for expenses of administration, salaries and pensions, the upkeep of buildings, the upkeep and equipment of libraries, museums and laboratories, for the remuneration of lecturers and assistants and of any additional professors who may be appointed. It is further ordained that out of the Parliamentary grants there shall be annually set aside a sum to account of the Pension Fund. The salaries of the principals are set forth as: Glasgow £1100, Aberdeen £800, Edinburgh £1100. The normal and minimum salary in the three Universities in the Faculty of Medicine and specially scheduled are as follows:—

	Glasgow.		Aberdeen.		Edinburgh.	
*Chemistry	£1200	£800	£900	£800	£1400	£800
*Physiology	1200	800	900	600	1400	800
*Pathology	1200	800	900	600	1400	800
*Anatomy	1100	700	900	600	1400	800
*Natural History	800	600	700	500	1000	800
*Botany	800	600	700	500	1000	800
Medicine	600	500	500	300	600	500
Surgery	600	500	500	300	600	500
Midwifery	600	500	500	300	600	500
Materia Medica	600	500	500	300	600	500
Medical Jurisprudence	600	500	500	300	600	500
Clinical Surgery	—	—	—	—	600	500

The figures in the first columns are what are called the normal salaries of the chairs, those in the second columns the minimum salaries. The six chairs marked with an asterisk are calculated on the ground that the Professors are not engaged in practice.

Queen Victoria Jubilee Institute for Nurses (Scottish Branch).

The fourth annual report of this Institute shows that there is an increasing demand for nurses both in Edinburgh and throughout the country. The result is that the home has had to be enlarged by the purchase of additional property. There is now accommodation for twenty-three nurses and further accommodation can be provided when necessary. During the year twenty-seven district probationers had entered the home and twenty nurses had completed their training and received appointments. At the close of the year the council was responsible for thirty-one nurses, of whom six were in the home, thirteen undergoing district training, eight being trained in the Edinburgh Royal Infirmary and the remainder in other hospitals. During the year fourteen new local associations had been formed. During the same period 1969 cases had been nursed and 40,977 visits had been paid. The total ordinary receipts had been £1731 9*s.* 5*d.* and the expenditure £1641 1*s.* 10*d.* Considerable progress is also reported regarding the pension fund for Queen's nurses in Scotland, which was originated last year by a gift of £500 and now stands at slightly over £800.

Opening of New Home for Nurses at the Royal Infirmary, Edinburgh.

In the beginning of the week the new home for nurses at the Royal Infirmary was formally opened. The building contains 121 nurses' rooms, a sick room with six beds and two separate sick rooms, 16 bath rooms and a large recreation room.

The Health of Leith.

During the past week the number of deaths in this burgh was 69, making the death-rate 43·82 per 1000. Zymotic diseases caused 23 of the deaths—1 being typhus fever, 5 scarlet fever, 1 diphtheria, 1 erysipelas and 15 measles.

Aberdeen District Nursing Association.

The monthly meeting of the executive committee took place recently, when it was reported that during the month from Nov. 14th to Dec. 12th 25 new cases had been entered on the register; 8 patients had recovered, 3 had been removed to the Royal Infirmary, and 6 had died. Number still on register, 23; number of visits paid during the month, 461. A pamphlet drawn up by the Rev. Dr. Danson, describing the working of the Association, is being circulated in Aberdeen.

Health of Aberdeen.

Dr. Matthew Hay, in his report for November, says that the death-rate for the month, 23·35 per 1000 per annum, is considerably higher than in the preceding month (19·73). It is, however, lower than in November, 1891, when it was 24·85. The increase is almost entirely due to a higher rate in the older and more densely populated part of the town. This difference is due to several insanitary causes, chief among which is insanitary housing. Dr. Hay urgently recommends an early effort to deal with the recommendations contained in the report by the sanitary inspector and himself, and assures the Town Council that till this is done no decrease in the death-rate can be expected. Dr. Hay reports also one death during the month from influenza, and mentions that he has seen during the past week several cases and has heard of many more. He reminds his readers of the epidemic of last year, when ninety deaths resulted from influenza in four months.

Draft Medical Ordinances for St. Andrews University.

The University Commissioners have this week issued ordinances relating to the allocation of chairs between St. Andrews and Dundee, the formation of faculties and fee funds and the establishment of the chairs necessary to complete the Conjoint University School of Medicine. The main provisions of the medical ordinance are similar to those of the other Scottish Universities. The previous ordinance is repealed and the degree of M.D. conferred on practitioners over forty years of age is therefore to be abolished. The new chairs to be established are those of pathology and materia medica, medicine, surgery and midwifery. The Dundee Royal Infirmary is recognised as the official hospital. The arrangements for the constitution of the Conjoint Medical School are not yet complete, no provision having yet been made for the formation of a fee fund in the Medical Faculty as in the case of the faculties of Arts and Science. In these faculties the Commissioners ordain the establishment of a common fee fund for the chairs in both St. Andrews and Dundee as well as a "salaries fund," out of which latter a specified "minimum" salary (£400 to £500) is to be paid. Thereafter the common fee fund (into which the whole of the fees are to be paid) is to be divided proportionally among the occupants of the contributing chairs to bring the gross salary up to a specified "normal" figure, which varies from £500 to £700. The matter of pensions is also dealt with. The total sum to be allocated to St. Andrews University out of public funds is £10,800 per annum, or about one-seventh of the whole amount disbursed to all the Universities. The objects upon which this sum is to be expended are clearly specified and include the endowments of the above-named medical chairs and the equipment required for the Conjoint Medical School. With regard to the curriculum, the first year of medical study (comprising chemistry, physics, zoology and botany) is duplicated and may be taken in either St. Andrews or Dundee. The courses for the remaining four years are to be provided exclusively in Dundee and comprise the chairs of anatomy and physiology in Dundee, along with the new chairs to be instituted, and clinical instruction in the Dundee Infirmary &c. The endowment of the chair of Medicine in St. Andrews is, on the death or resignation of the present occupant, to be diverted to the foundation of a chair in the Arts Faculty in St. Andrews.

Dundee Royal Infirmary.

The appointment of Superintendent of the Infirmary has become vacant owing to the resignation of Dr. M'Cosh. His occupancy of the post, extending over a period of more than seventeen years, has been marked by many improvements of a permanent character, and during his term of office the hospital has been raised to a condition of great efficiency. Dr. M'Cosh is to be entertained at dinner by the medical staff of the hospital and his professional and personal friends prior to his leaving Dundee.

December 21st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

General Prisons Board Report.

THE fourteenth report of the Board of Irish Prisons has now been issued. It treats of local and convict prisons and I desire for the present to refer to the former. The number committed to the larger local prisons during the year ended March last who were wholly illiterate was 11,835, or 32·5 per cent. of the total commitments to those prisons; while the proportion of illiterates of the population, five years old and upwards, in Ireland who could neither read nor write is shown by the census of 1891 to be only 18·4 per cent. The Board again draw attention to the evil of sending persons to prison simply for a few hours, and especially in cases of habitual and frequent offenders, and show that 65 per cent. of the entire number of sentences were for terms of fourteen days or under, while those sentenced to six months or over only represent 3 per cent. of the whole. Since the Board were invested with the management of local prisons in 1878 up to the present, they have reduced the number of bridewells from ninety-five to sixteen, thus lessening in number a class of prisons most of which were altogether unsuitable, both from a sanitary and disciplinary point of view, for the detention of human beings. The average daily number of prisoners in the local prisons during the year was 2506, and the deaths nine, equal to 3·6 per 1000 on the daily average number in custody. The death-rate for the estimated population of the whole of Ireland during the same period was 19·6. There were outbreaks of typhoid fever in four of the local prisons—in Tullamore, Clonmel, Galway and Mountjoy. In Tullamore the outbreak was remarkably sudden, and although very careful investigation was made as to its cause, and a special commission appointed to examine the prison, they could come to no decision. The healthy prisoners were removed to Clonmel and shortly after their transference three of them developed typhoid fever. There has been little change in the number of cases of insanity transferred from local prisons to asylums. The total number was 71, of whom 57 were insane on committal. The board have repeatedly in their reports called attention to the very objectionable practice prevalent throughout the country of committing lunatics to gaols instead of sending them direct to the asylums, but they regret to state that little or no improvement has taken place in regard to this matter during the past year. The profit realised on the various descriptions of industrial labour carried on in the several prisons during the year 1891–92 was £2879 11*s.* 3*d.*, in addition to which there were extra receipts to the amount of £166 10*s.* 9*d.*

Dublin Orthopædic Hospital.

The annual meeting which was held last week was presided over by the Lord Chancellor of Ireland. Several improvements have been carried out in this hospital which tend to increase the comfort of the inmates. Two of the wards, for example, have been artistically decorated by the members of the Kyrle Society. During the past year 98 new cases were admitted, which with 18 in hospital give a total of 116 treated within the year. Three deaths took place during the year and only 17 since its foundation, while the number of cases treated in it has reached a total of 1155.

Clinical Instruction in the Union Hospital and Infirmary, Belfast.

At the weekly meeting of the Belfast Board of Guardians held on Dec. 13th the Chairman (Sir D. Taylor) reported that

the committee appointed to consider the memorial presented at the last board meeting by the Belfast Medical Students' Association had met that morning and had a long conference on the subject of the memorial with the President of Queen's College, Professor Redfern, Professor Cuming and two representatives of the students, and they approved (one member of committee—a guardian—dissenting) of the following proposals submitted by Dr. Cuming:—"That the hospital and infirmaries of the Belfast Union be opened for clinical instruction in medical science to the students of Queen's College in the following manner and under the following conditions:—1. That the teaching be conducted by three unpaid clinical lecturers—one for medicine, one for surgery, and one for midwifery and the diseases of women, together with such of the medical officers of the union as may be willing to and may be appointed to act in conjunction with the clinical lecturers. 2. Each of the clinical lecturers to have placed under his care forty patients, selected from among those admitted to the hospitals and infirmaries. 3. The clinical lecturers to be responsible to the Board of Guardians and to the Local Government Board for the treatment of the patients so placed under their care, and to conform to such regulations as may be laid down for their guidance. 4. No patient to be placed in the clinical wards or retained in them contrary to his expressed wish, and no patient to remain in the clinical wards longer than the clinical lecturer shall deem advisable. 5. The clinical lecturers to be responsible to the Board of Guardians for the maintenance of due order during the period allotted to clinical instruction. 6. The regulations for clinical instruction and the nomination of clinical lecturers to be made by the Council of the Queen's College, subject to the approval of the Board of Guardians." A long discussion followed, in which, amongst other matters, it was stated that the union workhouse in Cork and other places were open for the purpose of clinical instruction to medical students, and that the Royal University recognised the certificates issued from these institutions. Finally, it was decided by a large majority (23 to 13) that the foregoing proposals be adopted and entered on the minutes, and that the Local Government Board be requested to sanction them.

The Belfast Health Society.

On Thursday, Dec. 15th, a meeting was held at Queen's College, Belfast, to inaugurate a Health Society in Belfast. Dr. H. O'Neill, having spoken of the high death-rate of Belfast, said the object of this new Belfast Health Society would be to draw the attention of the public to the laws of health by means of popular lectures, publishing of leaflets and by giving assistance to the constituted authorities in the detection of insanitary conditions, as well as by the promotion of sanitary improvements. Dr. Whitaker, medical officer of health, and Dr. Graham, chairman of the Public Health Committee, were present. It was decided to form such a society and to appoint the Rev. Dr. Hamilton, President of Queen's College, first President of the Society, Dr. O'Neill secretary, and Sir James Haslett treasurer.

Belfast Dispensary Committee.

At a meeting of this committee, held on Dec. 19th, it was decided to reapportion the districts and to create two new ones. For some time it has been felt that the medical officers have now too much to do, and the present rearrangement will serve to relieve them.

A subscription ball in aid of the funds of Mercer's Hospital was held last week at the Rotunda and proved most successful.

Dr. Giusani has been elected visiting physician to Cork Workhouse. There were four candidates for the post.

December 21st, 1892.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

A Medical Martyr.

AMONGST the victims to the late cholera epidemic at Havre was a *confrère*, Dr. Piesacki, who, dying at his post, left a penniless widow to mourn her loss and to support six members of the family. The Société de Protection des Victimes du Devoir Médical has come to the poor lady's aid by voting her a sum of 1000 francs together with an annual income of 200 francs. It has also been resolved to further her application for a grant of a tobacconist's shop. This may seem strange to English readers, but the privilege of vending the fragrant weed, which is in the gift of the Government, is much coveted. It is, as a rule, given to the widows or poor female relatives of soldiers or functionaries who die in the service of their country. The position is one to which no kind of humiliation is attached in France.

Posthumous Honours.

This is the time of year when scientific prizes are awarded by the various Societies of Paris. Last year I had the pleasure of recording the name of our distinguished compatriot Dr. (now Sir Frederick) Bateman of Norwich in this connexion. This year a diligent perusal of the prize-list of the Académie de Médecine fails to discover an English name, and yet the list is a very long one. The Leconte prize of the Académie des Sciences, of the substantial value of 50,000 francs (£2000), has been allotted to the work of the late Dr. Villemin, who will be known to posterity as the discoverer of the infectious and transmissible nature of tuberculosis. M. Pasteur, in presenting the report of the Prize Committee, said that few discoveries had influenced medical thought to such a degree as that with which Villemin's name will for ever be associated. This honour, continued M. Pasteur, must be counted for Villemin *le premier hommage de la postérité*.

Ward Echoes.

Professor Guyon never tires of emphasising the necessity of frequent catheterisations for the subjects of prostatic hypertrophy. This is the only way of preventing stagnation of urine and its corollary increase of tension of the bladder walls—the two dangers *par excellence* to be avoided in such cases. Hypertension induces congestion and the experiments of M. Reblaud show that congestion favours microbian infection, not only of the bladder itself, but of the ureters and renal pelvis. Even when the bladder is already infected repeated catheterism is the best safeguard against ascending pyelo-nephritis. One of Professor Guyon's patients had practised hourly catheterism without regard to antiseptic precautions for a period of twenty-six years, with the result that, although the bladder became infected the kidney remained healthy, and the "prostatic" lived to the age of 102 years. M. Guyon reminds us that the sensation of the *besoin d'uriner* becomes frequently dulled in these patients, and that consequently this must not be waited for before passing the catheter.

Dr. Legroux of the Trousseau (Children's) Hospital often draws attention to the significance of abdominal pain and vomiting in little girls affected with vulvitis. Such symptoms reveal the presence of peritonitis due to the penetration of the microbes of the vulvar pus into the peritoneal cavity viâ the uterus and the Fallopian tubes. In one such case which terminated fatally there were found post mortem a collection of pus in one of the tubes and numerous peritoneal adhesions in the pelvis. According to the same clinician a valuable sign of anæmia of a grave character may be discovered on auscultating the globe of the eye. In this disease, when the ear is applied to a flexible stethoscope placed over the globe covered by the upper eyelid, a *souffle* analogous to that heard in the neck and over the vessels of the limbs may be easily distinguished.

December 21st, 1892.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Cholera.

A MEMORIAL concerning the recent cholera epidemic has been laid before the Federal Council of the German Empire. It treats of the development of the epidemic, the measures taken against it, and its influence on international traffic. It contains the following: "The cholera is now as good as extinct in Germany. During November only isolated cases were reported. It is in Russia that the situation is still most grave; especially in the south and south-west of Russia many cases and deaths have occurred within the last weeks. In Livonia also the epidemic has spread to noteworthy dimensions. In Poland, especially in the districts of Radom, Siedlec and Lublin, it is by no means extinct; on the con-

trary, it seriously threatens the Prussian parts of the basins of the Niemen and the Vistula from there. Though the cholera may be regarded as vanquished for the present in Germany, and is also likely to be kept away from our frontiers by the measures taken during the coming winter, the danger of an epidemic in 1893 is not to be underrated. The experience of former epidemics is that, whenever cholera has penetrated into the basin of the Volga, it has generally abated in Russia during the cold season, but not quite ceased. Isolated cases generally occurred during the whole winter, became more numerous in spring, and produced new epidemics. The first cases of cholera which were of special importance for the prevention of an epidemic, had often, owing to the slightness of the symptoms, remained quite unnoticed. In view of this, the Minister points out the necessity of the bacteriological examination of the contents of the small intestine in all cases in which there is a suspicion of cholera. It is therefore urgently to be recommended, with a view to the rapid determination of the disease, that adequate material for investigation be at once sent to the nearest university institute provided with the requisite apparatus, or to the Imperial Office of Health, where a reliable decision will be promptly arrived at." The obvious objection to this is that the place where the suspicious case occurs may be very distant from any such institute. The cholera epidemic in Russian Poland is rapidly on the decrease.

Professor Virchow on Cremation.

Professor Virchow addressed the following letter to the Cremation Society in the early part of this month:—"In answer to your favour of the beginning of October, in which the board requested me to give my opinion of the utility of the introduction of optional cremation, especially in the case of persons dying of cholera or other epidemic diseases, I have to state that I adhere to the opinion expressed by me in the Prussian Landtag in 1881, and regard cremation as absolutely useful both from the sanitary and from the politico-economical point of view. For large cities especially, cremation is to be striven for, as burials *en masse* in cemeteries often immediately adjacent to inhabited districts reawaken apprehensions of danger."

Heat Apoplexy in the Prussian Army.

The number of cases of heat apoplexy in the Prussian army between March 31st and Oct. 1st, 1892, was 196, the number of deaths from this cause 11. The corresponding numbers in 1891 were 121 and 6. The increase was due to the great heat this year during the autumn manœuvres.

The Chicago Exhibition.

Sanitary Counsellor Dr. Oldendorff of Berlin has been appointed a member of the committee of the Section of Medical Climatology of the International Medical Congress connected with the Chicago Exhibition.

Paul Niemeyer.

The friends and pupils of the late sanitary councillor Dr. Paul Niemeyer, the founder of the Hygienic Society, have erected a monument of him on his grave at Rixdorf, one of the southern suburbs of Berlin.

December 12th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Cholera in Austria-Hungary.

THERE is now only the district of Husiatyn on the Russian frontier whence cases of cholera have been reported since Nov. 15th last; even this week two new cases occurred there. But other parts of Galicia and the other Austrian provinces have remained free from cholera. In the neighbouring parts of Russia the disease is raging very severely, especially in Podolia, and according to private and confidential reports received at Budapest, recent severe outbreaks of cholera have been notified in the southern provinces of Russia and at Batum. In Hungary the number of cholera cases decreased considerably during last month, and at Budapest, where 665 cases of cholera with 368 deaths were reported in October, only 188 cases with 111 deaths were recorded in November. Isolated cases only are occurring now at Budapest and in the provincial districts of Hungary and the measures directed against the spread of the epidemic have been abandoned by the Government.

The Poison of Egg Albumen.

In a previous letter to THE LANCET I reported that Professor Gruber of Vienna had prepared a poisonous substance from fresh egg albumen by treating it with water and alcohol. Further researches made by Professor Gruber revealed the fact that the poisonous action produced by the extract was due to the alcohols and to sulphide of hydrogen present in the albuminous liquid.

Poisoning by Corrosive Sublimate.

At a recent meeting of the Vienna Medical Society Professor Albert gave an account of an interesting observation made on himself. For two years he had suffered from dyspeptic troubles, the cause of which he could not at first discover. At the same time he observed that his finger-nails became softer and that two apparently healthy teeth were falling out spontaneously. He recently came to the conclusion that these symptoms might be due to poisoning by corrosive sublimate which he as a surgeon had to use daily. This view has now proved to be correct by an analysis of his urine, made at the Chemical Institute, a considerable quantity of iodide of mercury being obtained from it. His case should prove a warning to surgeons to be careful in using the sublimate, which seems to be easily absorbed by apparently healthy skin.

The Use of the Galvanic Current for the Examination of the Urine, Sputum &c.

Two Vienna physicians have recently used the galvanic current instead of the *centrifuges* now so much in use for producing deposition. The method is based on the same principle as that devised by Webster for the electrical treatment of sewage. By the electrolytic action of weak galvanic currents the gas-bubbles formed in the liquid carry with them the formed elements—cells, bacteria, even crystals—to the surface, whence they may be easily removed for microscopic examination &c.

December 12th.

NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

The Sanitary Condition of Wellington.

ON the evening of Sept. 14th a public meeting of vast importance to the inhabitants of the Empire City was held in the Opera House to consider the proposal of the City Council that a special loan should be raised for the purpose of carrying out an efficient system of drainage. This gathering has not met a moment too soon. There was a large attendance and great interest was taken in the proceedings generally. Mr. H. Bell, the Mayor of Wellington, presided and the seats on the stage were occupied by some of the leading citizens. The sum proposed to be borrowed for drainage purposes is £165,000. The Mayor proposed, after an introductory speech, the following resolution:—"That this meeting approves of the proposals of the City Council set forth in the public notice thereof as advertised." Mr. Bell drew attention to the present drainage of the city, showing that with the exception of a small part of it lying to the south of Newtown Ridge all the sewage of the city is discharged into the harbour. As a result the shores are silted up with the refuse of filth of a growing population. The watercourses have been converted into sewers and polluted. Their beds are therefore a fitting nest for the propagation of germs of all kinds of diseases. The existing system of box drains which constitute the main sewers—where there are no natural watercourses—are necessarily made large enough to carry flood water as well as the ordinary surface water sewage. The result is then that we get great spaces in these boxes where sewer air is constantly present and where "fever germs" can breed under exceptionally favourable surroundings. Furthermore, it must be remembered that a considerable part of the Te Aro end of the city consists of swamp land, in which the drains have sunk and are bent in such a manner as to leave "escapes" at many spots for the dangerous gases. To show that the condition of things is not on the mend and that something radical must shortly be done it is only necessary to quote the number of deaths from zymotic disease as shown by the

Registrar-General's report for the last six years. It is as follows:—

Year.	Under Five Years.	Over Five Years.	Totals.
1885	30	33	63
1886	63	22	85
1887	63	26	89
1888	30	25	55
1889	49	26	75
1890	43	34	77
1891	55	49	104

How is the remedy to be applied? Since Wellington or a large part of it lies on a flat and is surrounded by hills, to deliver the sewage of that flat into any other place but the harbour it must be lifted up. This can be accomplished by pumping, so that the sewage can be delivered into Cook's Straits. Now various plans have been suggested to engineers from time to time to accomplish this end. Sixteen years ago Mr. Climie was instructed to furnish plans &c. by the then existing City Council for a system of sewerage for 50,000 persons. Since then numerous other plans have from time to time been submitted, but for various reasons no definite step has been taken one way or the other. The City Council in 1890—much to their credit—having determined that the city should be cleansed, and having before them several schemes for effecting this purpose, proceeded to appoint a commission of independent experts—first, to examine the several schemes already sent in; and, secondly, to advise the Council generally as to the best means of draining the city. Admittedly two of the most eminent engineers in the colony were appointed, Messrs. Ferguson and Cuthbert. The further taxation which these loan proposals will involve is really of very little importance. It being settled that the city must be cleansed, it follows that the expenditure is like the doctor's bill—you cannot stop to count the cost. It is a matter of life and death. After all the additional rating will not be found to be excessive, for it will amount to 4½*d.* in the pound, and this will gradually grow less. An amendment to the Mayor's address was introduced by Mr. MacDonald, "That the citizens of Wellington are not in favour of raising a loan under the Wellington City Sanitation Loan Empowering Act of 1892 until Parliament has passed an Act vesting the expenditure of any moneys raised under the provisions of the Act in a drainage board." A very lengthy discussion ensued, and finally the resolution was put to the meeting and on a show of hands was declared carried by a majority of about two to one. However, on the evening of Sept. 24th an opposition mass meeting was called by advertisement to consider what action should be taken regarding the poll of ratepayers in connexion with the borrowing of this sum of £165,000. Several speakers insisted that a special drainage board should be elected and the following resolution was put: "That this meeting is strongly of opinion that to entrust the City Council with the uncontrolled expenditure of £165,000 for drainage purposes would be highly imprudent, and the meeting pledges itself to vote against the loan proposals and not to support any large expenditure of money for drainage until a duly constituted drainage board has been formed to deal with the complete sanitation of the city of Wellington." The proposition was ultimately put, and on a show of hands being taken about half a dozen hands were held up in opposition, the meeting (consisting of about 700 persons) being practically unanimous in support of the resolution. The effect of these two meetings was that the whole subject was left to the decision of the body of ratepayers, the result being that the ratepayers by a most substantial majority decided to accept the drainage scheme and to furnish the means for the same. I am glad to note that there was no difference of opinion as to the scheme generally and I sincerely trust that now we shall soon see Wellington emerge from the dark cloud of insanitary scandal which has for so many years surrounded it.

DEATH OF A MEDICAL CORONER.—The death is announced of Mr. W. Webber Munckton, M.R.C.S., for nearly forty years Coroner for the Western Division of Somerset. His failing strength—he was seventy-four years of age—had rendered it necessary of late that the duties of the office should be carried on by his deputy, Dr. Cordwent of Taunton.

Obituary.

SIR RICHARD OWEN, K.C.B., F.R.S., F.R.C.S.ENG. (HON.).

AFTER a life of strenuous labour the giant constitution of Professor Owen has at last succumbed, after a conflict with Death in which every inch has been stoutly contested. Born at Lancaster on July 20th, 1804, Owen's remarkable vitality has only failed when his ninetieth year was almost within hail. And it has been a life full of work, full—too full, perhaps—of controversy, and yet full of much happiness at home, among friends, and abroad. The bitterness of death, in his case, fell on him thrice—when, in 1873, he lost his wife; his attached sister, who for many years kept his house; and his only son. As to all who live to a great age, there came, too, the grief of losing all or nearly all with whom he had lived or worked, chief of all of whom was Edwin Chadwick. Almost contemporaneous with Owen there worked in various countries of Europe great zoological pioneers. Of these, Henri Milne-Edwards of Paris and Carl Theodor von Siebold of Munich preceded him, but Sven Loven of Stockholm and P. J. van Beneden of Louvain are left to mourn him.

The great age to which Owen lived may be measured by remembering that he was the pupil of Cuvier; that he was addressed in terms of admiration of his "father's" work by Oken, who did not recognise in the youthful Englishman an already famous zoologist; and that he was assistant to Charles Bell when the last named was Professor at the College of Surgeons of England. United by ties of marriage with Clift, he was almost brought into touch with John Hunter, the great object of his veneration. Before his eyes Darwin rose to his great pre-eminence, and he watched with interest the whole of the career of Francis Balfour, only too soon lost to science. Princes now of middle age were his pupils. It was by Sir Robert Peel that he was first placed on the Civil List, and for forty years he occupied the charming cottage in Richmond Park, which he owed to the favour of his Sovereign. A life of such extent would, with an ordinary worker, result in a considerable accumulation of books and memoirs; but Owen was more than an ordinary worker; rising early, he did several hours' writing before attending his office in Lincoln's-inn-fields or the British Museum. Better than most men he knew how to rid himself of untimely visitors, and he gave less time than many give to affairs of business outside their own walk in life. The result is to be seen in his catalogue of the Hunterian Museum, which extends over ten quarto volumes; his three volumes on the Anatomy of Vertebrates; and his treatise on Odontology, illustrated by more than 150 plates. Some of the numerous memoirs which he communicated to learned societies have since been collected into separate volumes; those on British fossil reptiles fill four quartos, and the twenty-five memoirs on the fossil birds of New Zealand form another handsome volume. Five memoirs were devoted to the osteology of marsupials, while the extinct mammals of Australia and the reptiles of South Africa were very copiously dealt with. He did not, however, as many do now, confine himself to one group of the animal kingdom; the once rare sponge, now so common a drawing-room object, was first described by him and appropriately called "Euplectella." Having his attention called "by an intelligent student of the name of Paget" to a deposit in human muscle, he was the first to give a systematic zoological description of the now well-known Trichina. Of nearly every animal of importance or interest he made early, if not the first, dissections. On the nautilus he wrote a memoir which is still classical and is most beautifully illustrated; he dissected its rare zoological ally, the Spirula, and the Argonaut, with its delicate shell. The apteryx, the dodo, the giraffe, the gorilla, have all had Owen among their historians. And with what charm are many of these histories told, for if Owen disliked the speculations of the modern school he was always on the look out for an opportunity to generalise. Some of these generalisations are now universally accepted, others are still in doubt; one suspicion has been only recently shown to have been justified; others, again, have been shown

to be based on insufficient knowledge or inaccurate observation.

It is striking that the most important general doctrine which Owen was the first to teach has been of considerable service in the exposition of the theory of evolution. Till he pointed out the difference no distinction was made between organs that performed the same duties and organs that had the same structure; both were called analogous organs. He, however, distinguished as analogous those that, like the wings of butterflies, bats and birds, served the same purpose, from those that are homologous, or, like the wings of birds and bats, the arm of man or the forefoot of the horse are formed on the same plan. It is clear that when the question was asked, Why are homologous organs made in the same way? an obvious answer (if not, indeed, the right answer) is because they are descended from an organ common to them all.

The whole of Owen's long working life was chiefly spent in two institutions only. After receiving his medical education at Edinburgh he was for a short time connected with St. Bartholomew's Hospital; selected as an assistant to Clift in 1828, he became in time Conservator of the Hunterian Museum, and held that office till 1856; from 1834 he was for twenty-two years Hunterian Professor, and his lectures attracted large audiences and the most select of the intellectual society in London. From 1856 to 1884 he was superintendent of the natural history departments of the British Museum. His official energy in this post was largely directed to the extension of the galleries devoted to natural history. He early found an ardent supporter in Mr. Gladstone, and there can be no doubt that Owen never forgave Mr. Disraeli for delaying by an adroit speech and skilfully caught votes the building of the new museum at South Kensington. In 1882 and 1883 Owen had the satisfaction of seeing the building open to the public, and the treasures from Bloomsbury brought safe to their new home. His strength, however, was beginning to fail, and early in 1884 he resigned his office. He could now say with Dido:

"Urbem praeclaram statui; mea moenia vidi,"

and the time for beginning to rest had come. For some years he was connected with the Royal Institution as Fullerian Professor. As has already been said, Owen did not busy himself much with a share in affairs. He was of course for many years to all practical purposes the unpaid prosector of the Zoological Society, but he found his reward in the dissection of the animals. He made numerous reports to the British Association, but they were reports of investigations. In 1857 he was president of that learned body and he was the first president of the Microscopical Society, in the institution of which he took some interest. He was thrice a member of a Royal Commission when the questions of public health and meat supply were under consideration.

Of the world's honours he had his share. Made a C.B. in 1873, he became a K.C.B. on his retirement from the British Museum; the Sovereigns of Italy and of Brazil conferred distinctions on him; he belonged to the Prussian "Ordre pour le Mérite" and four years later (1855) he entered the French "Legion d'Honneur." He received the Royal medal before he was forty years of age and the Copley medal in 1846; he was an Honorary Fellow of the Royal Colleges of Surgeons, both of England and Ireland.

Richard Owen lived so long that his many great services to science stand in danger of being forgotten by the present generation, who knew him better as the pungent controversialist of the year that followed the publication of the "Origin of Species." It is true, indeed, that Owen was not seen at his best in controversy; to those who knew him at home, who were privileged to saunter with him in the beautiful garden behind his little cottage, this was a matter for wonder no less than regret. Wonder, because his love of nature was so intense that one thought it must have been the mistress of all his actions; and regret, because his nature was so affectionate, his manner was so engaging, and his conversation so delightful, that none ever came into familiar contact with him but cherished for him a profound regard. The manner which endeared him to his Queen and her family, the ability which gave him a place in that most select of coteries, "The Club," the social flexibility which made him at home with men of all professions were as much at the services of the least known of his friends as at the command of a princess. Those who knew him at home will always cherish the recollection of a nature essentially happy, grateful for kindness, and anxious to please and serve those with whom he was glad to associate.

SAMUEL DUKINFIELD DARBISHIRE, M.D. OXON., M.R.C.S.

To a small number who were aware of the long perio of illness through which he had passed the announcement in *The Times* of the death of Dr. S. D. Darbishire came as no surprise, but there must be a very large number of his associates at the University and in the medical profession who will lament with deep sorrow the early loss of one who had throughout his life endeared himself to all with whom he was brought in contact. Born at Manchester in 1846, he was educated privately until he matriculated at Balliol in 1866. His father was a respected and prosperous merchant, and Samuel Dukinfield was the seventh son. His early days were for the most part spent at his father's country seat, Pen Dyffryn, near Penmaenmawr, where he became an expert and powerful swimmer, and formed friendships with many of those, older and younger, with whom his mother took pleasure in filling her large and hospitable mansion amongst the hills of North Wales. Soon after going to Oxford he showed his talent for rowing and was made stroke of the Balliol eight. At that time the Balliol boat was very low on the river, but under his auspices it soon began to make "bumps" and to gain a higher place. In 1868 he first stroked the Oxford eight in the race at Putney against Cambridge. Supported by a powerful crew he secured for his University the eighth consecutive victory against her rivals and in the following year he again repeated his success, but in 1870 his crew were beaten at Putney. The most notable event, however, in his career as an oarsman was the race which was rowed from Putney to Mortlake, on Aug. 27th, 1869, against a four of Harvard University. The Americans had sent a challenge to Oxford, which was readily accepted, although there was some difficulty in arranging the match owing to the time of year at which the Americans preferred to row. At length, however, a crew was found which contained perhaps the four most powerful and finished oarsmen that ever sat in a boat together. Of these Darbishire, who rowed stroke, was the lightest member of the crew, weighing 11st. 8lb. The Americans dashed off with a lead but were soon overtaken, and the Oxford crew had an easy task and finished the distance in 22 min. 28 sec. The following extracts from his letter to Dr. Morgan, published in "University Oars," are of interest at the present moment. Writing in 1869, he says: "As to myself, I can confidently say that the rowing and training have done me a great deal of good. I have always been very well during training and the more I row and train the stronger and healthier I seem to get. If my testimony is of any weight I can assure you that as far as my experience goes the 'Varsity Race and the training for it is not injurious; but it is when men row continually in races, both in training and out, or when they keep in training too long or break it too suddenly, that they injure themselves." In the three years that he stroked the 'Varsity boat his weight was, in 1868, 11st. 3lb., in 1869 11st. 9lb., in 1870 11st. 11lb. He took his arts degree in 1870 and soon afterwards entered as a student of St. Bartholomew's Hospital. He became M.R.C.S. in 1876 and was house surgeon to Mr. Callender and subsequently house physician. He then went abroad and studied at Tübingen and Vienna. On his return he worked in the out-patient rooms of the Hospital for Sick Children, Great Ormond-street. He took the M.D. of Oxford in 1883, and besides two papers published in St. Bartholomew's Hospital Reports wrote a Lecture on Recreation in the publications of the International Health Exhibition. At one period he got together materials for a contemplated paper on the action of muscles in rowing, but this was unfortunately never published. After his marriage he settled in general practice in Addison-road, Kensington, but a few years later he bought the practice of Dr. Giles in Oxford and settled in the house vacated by that gentleman in the High-street, near Magdalen College. He was elected to the staff of the Radcliffe Infirmary, of which at the time of his death he was the senior physician. A vacancy occurring in the office of University Coroner, his candidature was supported by a very large number of friends, and after an unusually large poll he was elected to the office. He became an Examiner in Medicine for the University and a member of the Board of Faculty of Medicine. He was also the local secretary of the Oxford Graduates' Medical Club, and

besides fulfilling all these duties found leisure for the congenial work of coaching the University and other crews. Not long after taking up his residence in Oxford his health began to fail and he became very emaciated and worn. After consulting two or three London physicians he went to St. Thomas's Home, where he improved to a certain extent; but the symptoms, which were mainly attributable to some nerve disorder, became more aggravated, and he went abroad, but returned greatly reduced in health, and died under the shadow of the hills where his boyhood had been passed.

JAMES H. AVELING, M.D. ABERD.

IT is with regret that we have to record the death of Dr. Aveling, who, as an obstetrician as well as a gynæcologist, was an earnest worker in the department of practice to which he had devoted himself. As an example of his original work in the first department we may mention his midwifery forceps with the perineal curve, an important step in the direction of the great principle of axis traction so enthusiastically promulgated by the celebrated Tarnier of Paris. In the department of gynæcology we may mention his shot and coil sutures, his polyptribe and his sigmoid repositor for chronic inversion of the uterus. Dr. Aveling commenced his professional career in Sheffield and from the commencement of that career devoted himself especially to the treatment of the surgical diseases of women. Diligently cultivating this field he soon succeeded in establishing a hospital for women in that town, one of the first of its kind in England. In 1870 he left Sheffield with the good wishes of its citizens, displayed in the form of a public testimonial presented to him by the Mayor in their name. Shortly after settling in London he founded, with the assistance of Dr. Robert Barnes and Dr. Chambers, the Chelsea Hospital for Women. Dr. Aveling was for many years the editor of the *Obstetrical Journal*, during part of which time he was associated with the late Dr. Wiltshire. On his resignation he was succeeded in the editorial chair by Drs. Galabin and Herman successively. His contributions to medical literature were numerous and for the most part exhibited originality to an unusual extent. He was possessed of the inventive faculty, a quality found in other members of his family, for his brother was a well-known engineer who invented the steam road-roller. Dr. Aveling's most important works were "The Influence of Posture on Women in Gynæcic and Obstetric Practice," "The Chamberlens and the Midwifery Forceps," "English Midwives, their History and Prospects," "Memorials of Harvey," and "Inversion of the Uterus." Of the above-mentioned works we can especially recommend to our readers his "History of the Chamberlens and the Midwifery Forceps." In addition to these works Dr. Aveling contributed throughout the whole of his career a series of clinical articles to medical periodicals. He was for some time chairman of the board for examining midwives of the Obstetrical Society of London. He was a believer in the electrical treatment of uterine tumours and employed Apostoli's method of dealing with them. In addition to his professional work he took great interest in archæology. As an example of his work in this direction we may mention 'The History of Roche Abbey." Shortly after the publication of this work he was elected a Fellow of the Society of Antiquaries. He also wrote a volume of fables in verse, which he composed during his holidays in Scotland. His remains were cremated at Woking on Thursday, Dec. 15th, in the presence of a large number of friends. He succumbed at the age of sixty-four to an acute attack of typhoid fever, which lasted only ten days.

GILBERT W. NORTHEY, M.R.C.S., L.S.A.

MR. NORTHEY, who died on the 16th inst. at the age of forty-two, was one of the best known practitioners in Devonshire. His death took place at Tavistock, his native town, where his father, whom he succeeded in practice, still survives him. Mr. Northey was a very fine type of the country practitioner; a man of indomitable perseverance and of splendid powers of endurance, he has largely fallen a victim to his love of work and his devotion to his patients. Mr. Northey was for the last twenty years in large and active practice in Tavistock and the neighbourhood, and it is not too much to say that to few men is it given to leave behind them a greater void or to be more generally missed. Alike in the sick room and in the hunting field he had by his genial courtesy made many a Devonshire man with whom he had but the most slender acquaintance feel the charm of his personality. The deceased leaves behind him a widow and four children and innumerable friends to mourn his early death.

Medical News.

UNIVERSITY OF DUBLIN: WINTER COMMENCEMENTS.—The following degrees were conferred last week by the University Caput:—

Bachelor in Medicine, Surgery and Obstetrics.—**Arthur Joseph Abbott, Vernon Langley Ardagh, Francis James Barter, George Beare, Henry Mark Eustace, Thomas Gibbons, Robert Wallace Wesley Henry, John Halahan, Gervais Bolton Jones, Frederick Kiddle, Alfred Moore, Hercules Bradshaw Moorhead, Arthur Augustus Mussen, John Switzer Owens, Charles Howard Saunders, Charles Burnett Scott, and Ernest Wentworth Wade.**

Doctor in Medicine.—**Arthur Joseph Abbott, Lyster Cole-Baker, Harry Fayle, Frederick James Green, Vernon Lamphier Jones, William Ffennell McCarthy, James Acheson McCullagh (stip. cond.), Hercules Bradshaw Moorhead, Nicholas Alexander Reid, Horatio Francis Ninian Scott, Alexander Silcock, Francis Sydney Swiney, and Samuel Constantine Westwood.**

In Absentiâ.

Bachelor in Medicine.—**Henry Lindo Ferguson.**

Doctor in Medicine.—**James Wilson Eakin, Henry Lindo Ferguson, and Ludovic Tarleton Young (stip. cond.).**

ORDER OF ST. JOHN OF JERUSALEM.—Her Majesty the Queen has sanctioned the enrolment of Mr. S. Osborn, F.R.C.S., as an honorary associate of the Order of St. John of Jerusalem in recognition of his services in the cause of "first aid to the injured" and he has accordingly received the decoration of the Order.

INSTRUCTION IN FEVERS.—It is announced that a course of instruction in the diagnosis and treatment of fevers will be given in January at the five hospitals of the Metropolitan Asylums Board. These courses will be conducted respectively by Dr. Goodall at the Eastern Hospital, Dr. Gayton at the North-Western Hospital, Mr. Bruce at the Western Hospital, Dr. Caiger at the South-Western Hospital and Dr. MacCombie at the South-Eastern Hospital.

A COTTAGE HOSPITAL FOR REDDITCH.—Some time ago it was announced that the late Mr. Edwin Smallwood of Alcester had bequeathed the sum of £5000 for the purpose of erecting a cottage hospital for Redditch. Some difference of opinion appears to have arisen with regard to the eligibility of a proposed site, and in the end Mr. W. Smallwood, the brother of the deceased and residuary legatee, has generously supplemented the bequest by the gift of £10,000, the whole sum being sufficient to defray the entire cost of the hospital.

HOSPITAL SATURDAY FUND.—On Saturday last a meeting attended for the most part by representatives from metropolitan cycling and athletic clubs was held at the Mansion House with the view of considering the proposal to organise sports in London next year in aid of the medical charities in connexion with the Hospital Saturday Fund. The Lord Mayor took the chair in the first instance and expressed his sympathy with the proposal. Subsequently Mr. Dyke Acland presided, and a resolution was carried pledging the meeting to support the suggestion.

ÆSCULAPIUS LODGE, No. 2410.—The ordinary meeting took place at the Café Royal, Regent-street, on the 14th inst. In the unavoidable absence of the W.M., Deputy-Inspector-General Belgrave Ninnis, M.D., R.N., Bro. Brindley James presided, supported by the officers, a large number of brethren and some distinguished visitors. Bros. Hugh Lane, L.R.C.P.Edin., M.R.C.S.Eng. and John Davies, M.R.C.S.Eng., L.S.A.Lond., were unanimously elected joining members. Bros. W. Arbuthnot Lane, M.S.Lond., F.R.C.S.Eng., and Frank Fowler, L.R.C.P.Lond., M.R.C.S.Eng., were admitted to the second degree. After the routine business was gone through the lodge was closed. At the subsequent banquet the usual royal and masonic toasts were given with commendable brevity, the intervals being pleasantly occupied by instrumental and vocal music of a high order.

CHESTER INFIRMARY.—By charging a shilling a head for viewing Eaton Hall, the seat of the Duke of Westminster, his Grace has been enabled to raise annually some £500, which is handed over to the treasurer of the Chester Infirmary. This year the proceeds from this source have amounted to £600.

THE EXPOSURE OF PUTRID FISH.—At the County of London Sessions last week a manufacturer of manure and his carman were charged with collecting fish offal in a putrid state without having subjected it to proper disinfection. The nuisance, it appears, had been continued for a long time, and Sir P. H. Edlin imposed a fine of £40 and bound over both defendants with sureties to keep the peace for twelve months.

HULL AND EAST RIDING CONVALESCENT HOME.—For the purpose of raising a fund to provide means for furnishing and maintaining the home, the building for which has been supplied by the generosity of Messrs. J. and F. Reckitt, a public meeting was held this week. It appears that a sum of from £4000 to £5000 will be required for this purpose and an annual income of at least a third of that amount has to be secured. The Mayor, who presided, proposed a resolution thanking Messrs. Reckitt for their generous gift, and in the course of the meeting a hope was expressed that the amount necessary to complete the gift may be forthcoming.

MEDICAL DEFENCE UNION.—A council meeting was held at the Medical Institute, Edmund-street, Birmingham, on Friday, Dec. 9th, at 4 P.M., Dr. Saundby in the chair. Eleven fresh applications for membership were accepted. The recommendation of the Metropolitan Local Committee was adopted, and it was resolved to defend a member in an action for malpraxis, with which he was threatened. It was resolved to obtain legal opinion on the interpretation of Section 22 of the Coroners Act 1887. A letter of thanks was received from a member who had been assisted. A local committee was adopted for Monmouthshire, and also for the town of Monmouth. Other business was transacted.

FOOTBALL CASUALTIES.—On the 10th inst., while playing a game on the Chilwell-road ground at Beeston, a member of the Chilwell Red Rose Football Club fractured his arm. During a match at Dublin on the 16th inst. between Dublin and Cambridge Universities, a Cambridge "forward" fractured one of his legs. On Saturday last the following casualties occurred:—A youth aged twelve of Small Heath, Birmingham, while playing a game, fractured one of his legs and was admitted to the Queen's Hospital. In the course of a match between Blackpool and Fleetwood reserve teams at the Royal Palace Grounds a Blackpool "forward" fractured one of his legs. In the progress of a match at Coalport between Coalport and Shiffnall a player in a scrimmage fractured one of his legs. During a match between the Hartington (Staveley) Club and New Whittington Exchange a player sustained a compound fracture of the right leg and dislocation of the ankle and was removed to the Chesterfield Hospital. In a match at Farnham Park between Farnham and a team from the Lincoln regiment stationed at Aldershot a player fractured his right leg.

PROSECUTIONS UNDER THE INFECTIOUS DISEASES (NOTIFICATION) ACT.—The first prosecutions in Liverpool under this Act took place before the stipendiary magistrate on Dec. 14th. It appears from the evidence of Dr. Hope, the deputy medical officer of health, that on Nov. 25th a man named Patten was removed to hospital from 134, Elias-street, suffering from confluent small-pox from which he since died. In accordance with the practice in Liverpool, in addition to the usual disinfection and cleansing of the premises, daily visits were made by the inspector, whose business it was to inquire whether any person in the house is unwell, and if so, to report the matter forthwith. Three of Patten's children developed small-pox on December 2nd and 3rd, and a fourth patient, son of a woman named McKnight who lived in the house, also fell ill with the disease on December 3rd. It was proved that up till December 8th both Mrs. Patten and Mrs. McKnight assured the inspector that every one in the house was perfectly well, and the actual condition of things was not discovered till December 9th. Mrs. Patten was fined the full penalty of 40s. and costs, and Mrs. McKnight 20s. No medical man had been called in.

JUBILEE OF M. PASTEUR.—The celebration of the seventieth birthday of M. Pasteur will take place in the Grand Amphitheatre of the New Sorbonne on Tuesday, December 27th, 1892, at 10.30 A.M.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BURY, R. F., has been appointed House Surgeon to St. George's Hospital.

CORT, J. G. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Second Sanitary District of the Blackburn Union.

CAMPBELL, W. A., M.B., C.M. Glasg., has been appointed Medical Officer for the Usk Sanitary District of the Monmouth Union.

CRAIGIE, JAMES, M.D., C.M., B.Sc. Pub. Health, Edin., has been appointed Medical Officer of Health for the Burgh of Musselburgh, N.B.

CULROSS, JAMES, M.A., M.B., C.M., has been appointed Medical Officer and Public Vaccinator to the No. 4 District of the Newton Abbot Union, vice Davies, resigned.

DOUGLAS, NORMAN G., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer to the Western District of the Scarborough Union and Public Vaccinator for the Borough.

ELLIOTT, C. N., M.B., C.M. Dub., has been appointed Medical Officer of Health for the Rural Sanitary District of the Oundle Union, vice Calcott, resigned.

ELLIS, W. C., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Tollerton Sanitary District of the Great Ouseburn Union.

GOODWIN, EDWD. KNOT, M.R.C.S., L.R.C.P. Lond., has been appointed Assistant House Surgeon to the Royal Albert Hospital and Eye Infirmary, Devonport, vice McKinnon, resigned.

HARRISON, REGINALD, F.R.C.S., has been appointed Honorary Surgeon to the Kingston Provident Dispensary, vice Cock.

HUGHES, EDWARD, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer to the Collieries at Ton, Ystrad Rhondda.

LITTLE, ANDREW, M.B., C.M. Aberd., has been appointed Ophthalmic Surgeon to the Victoria Hospital, Burnley.

MILLIGAN, WM., M.D., C.M., has been appointed Lecturer on Diseases of the Ear at Owens College, Manchester.

OVEREND, W., has been appointed Junior Assistant Medical Officer to the Infirmary, Fulham Union, vice Smith.

ROMER, R. LESLIE, has been appointed House Physician to St. George's Hospital.

SMITH, SYDNEY C., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer at the Highgate Infirmary.

SYMMERS, WM. ST. CLAIR, M.B. Aberd., has been appointed Pathologist to the General Hospital, Birmingham.

WARRINGTON, W. B., M.B., B.Ch. (Vict. Univ.), has been appointed House Physician to the City of London Hospital for Diseases of the Chest, Victoria-park.

WILSON, JOHN, L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer of Health, Pudsey.

WINSTANLEY, R. W., L.R.C.P., L.M. Edin., M.R.C.S., has been appointed Medical Officer for the Shottermill Sanitary District of the Farnham Union, vice Whiting.

WOOLLETT, S. W., M.R.C.S., has been appointed Medical Officer for the Wangford Sanitary District of the Blything Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ALNWICK INFIRMARY.—House Surgeon (unmarried). Salary £120 per annum, with furnished apartments, attendance, coals and gas, but without board.

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £50, with board and washing.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—Assistant House Surgeon. Salary £50 per annum, with apartments and board.

BRIDGWATER INFIRMARY.—House Surgeon. Salary £80 per annum, with board and residence.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's-inn-road, W.C.—House Surgeon. Rooms, coals, and lights provided.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, London, S.W.—Clinical Assistant. The fee is £3 3s. for the three months' course.

CROYDON GENERAL HOSPITAL.—House Surgeon for two years. Salary £100, increasing £10 per annum up to £120, with board and residence in the hospital.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. House Physicians.

HOSPITAL OF ST. PETER PORT, Guernsey.—Surgeon for one year. Salary £50 per annum, currency (vaccination included), in addition to which a certain allowance is made for the vaccination of children of persons not chargeable to the parish.

HOSTEL OF ST. LUKE, Devonshire-street.—Honorary Visiting Medical Officer. (Applications, by letter only, to the Secretary, Hostel of St. Luke, Church House, Westminster.)

HULL ROYAL INFIRMARY.—Junior Assistant House Surgeon. Salary £40, with board and lodging.

KENSINGTON DISPENSARY.—Honorary Medical Officer. (Applications to the Hon. Secretary, 7, Stamford-road, Kensington-square, W.)

KING'S COLLEGE, London.—Assistant Physician.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall, for twelve months. Remuneration £250 per annum, with board and residence.

NATIONAL HOSPITAL FOR THE PARALYSED (ALBANY MEMORIAL), Queen-square, Bloomsbury.—Senior House Physician. Salary £100 per annum.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Senior Assistant House Surgeon. Salary £75 per annum, with board, lodging, and washing.

SOUTHPORT INFIRMARY.—House Surgeon. Salary £100 per annum, with board, furnished rooms, and attendance.

STOCKPORT INFIRMARY.—Junior House Surgeon, for six months. Board and residence provided. An honorarium of £10 will be given after six months' satisfactory service.

UNIVERSITY OF GLASGOW.—Assistant Examiner in Zoology. Salary £30 per annum.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE, Cardiff.—Professor of Anatomy. Stipend £350 per annum.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE, Cardiff.—Professor of Physiology. Stipend £350 per annum.

WEST HERTS INFIRMARY, Hemel Hempstead.—House Surgeon and Dispenser, who shall also be Assistant Secretary, for two years. Salary £100 per annum, with board, furnished rooms, free light, attendance and washing.

Births, Marriages and Deaths.

BIRTHS.

CAMERON.—On Dec. 19th, at 201, Gray's-inn-road, W.C., the wife of W. Sinclair Cameron, L.R.C.P. & S.E., of a daughter.

KNIGHT.—On Dec. 19th, at Keswick, the wife of Alexander A. H. Knight, M.D., of a son.

LOWNDS.—On Dec. 14th, at Hall Gate, Doncaster, the wife of Henry A. Lownds, L.R.C.P., of a son.

MCGEAGH.—On Dec. 15th, at 28, Spellow-lane, Liverpool, the wife of R. T. McGeagh, M.D., of a son.

OLIVER.—On Dec. 13th, at Kingsland-road, E., the wife of Dr. Hewitt Oliver, of a daughter.

STOKES.—On Dec. 21st, at 2, Highbury-crescent, N., the wife of H. Fraser Stokes, M.R.C.S. Eng., L.R.C.P. Lond., of a son.

TUKE.—On Dec. 6th, at Chiswick House, Chiswick, the wife of T. Seymour Tuke, M.A., M.B. Oxon., of a daughter.

WINGATE-SAUL.—At Fenton-Cawthorne House, Lancaster, on Dec. 18th, the wife of W. W. Wingate-Saul, M.D., of a daughter.

MARRIAGES.

BRADBURY—WHELER.—On Dec. 21st, at St. Mary's, Newton Solney, Derbyshire, Harvey K. Bradbury, L.R.C.P., of Burton-on-Trent, to Annie Rose, elder daughter of Mrs Wheler, of Newton Solney, and granddaughter of the late Josiah Cash, M.D., of Matlock Bridge.

CLARKE—HARRISON.—On the 20th inst., at St. Paul's Church, Clifton, by the Rev. J. Michell Clarke, rector of Fenny Drayton (uncle of the bridegroom), assisted by the Rev. Canon Mather, the Vicar, and the Rev. W. Gordon (cousin of the bride), J. Michell Clarke, M.A., M.D. Cantab., M.R.C.P., eldest son of the late W. Michell Clarke, Surgeon, Clifton, to Amy, eldest daughter of Dr. Alf. J. Harrison, of Failand Lodge, Clifton.

CRAWFORD—WILSON.—On Dec 15th, at Newington-road, Edinburgh, W. S. Crawford, B.A., Caius College, Cambridge, F.R.C.S.E., of Mount-pleasant, Liverpool, to Sheilah, third daughter of J. Wilson, M.D., of Wanlockhead, Dumfriesshire.

JOHNSON—KING.—On Dec. 20th, at St. Matthew's, Bayswater, Raymond Johnson M.B., F.R.C.S., of Weymouth street, Portland-place, W., to Mary Helen, elder daughter of Robert King, of Lansdowne-road, W.

MACLEAN—HEWLETT.—On Dec. 13th, at St. Mary's Church, Totnes, Devonshire, J. C. B. Maclean, M.A., M.B., Lieutenant-Surgeon, R.N., son of the late Rev. A. Maclean, D.D., of Kiltearn, Rossshire, to Maude, eldest daughter of E. Hewlett, The Priory, Totnes.

OWEN—O'NEILL.—On Nov. 26th, at St. Michael's Church, Colombo, Ceylon, Arthur Deaker Owen, M.R.C.S., of the Perak Government Service, Straits Settlements, to Katharine, eldest daughter of Major O'Neill, Teignmouth, Devon, late 28th Regiment.

RUSSELL—LOCKHART.—On Dec. 20th, at All Saints, Hockerill, Bishop's Stortford, by the Rev. John Menet, M.A., Vicar, assisted by the Rev. W. J. Frere, M.A., George H. Russell, M.D.Lond., J.P., of Manchester, to Amy, third daughter of the late Theodore Lockhart, Esq., and granddaughter of the late James Lockhart, Esq., of Lanhams, Essex, and Marston and Oving, Bucks.

DEATHS.

BRIGHT.—On Dec. 18th, at his residence, Stafford-terrace, Plymouth Dr. James Richard Douglas Perceval Bright, in the 89th year of his age.

DARBISHIRE.—On Dec. 16th, at Plas Mawr, Penmaenmawr, S. D. Darbishire, M.D., late of Oxford, aged 46.

MAYBURY.—On Dec. 10th, at his residence, Cedar Lodge, Frimley, Surrey, William Augustus Maybury, M.R.C.S. & L.S.A., aged 83.

WALSHE.—On Dec. 14th, at Hyde-park-square, Walter Hayle Walshe, M.D., LL.D.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Dec. 22nd, 1892.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Dec. 16	30·37	S.W.	44	42	55	52	42	..	Foggy
,, 17	30·31	W.	50	48	53	51	42	..	Cloudy
,, 18	30·32	S.W.	49	48	54	51	46	..	Cloudy
,, 19	30·22	S.W.	46	45	..	47	45	..	Overcast
,, 20	30·09	W.	44	43	..	47	43	..	Overcast
,, 21	30·11	S.W.	44	43	..	47	42	..	Foggy
,, 22	30·07	S.E.	38	37	..	39	37	..	Foggy

Medical Diary for the ensuing Week.

Monday, December 26.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays, at the same hour.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M.; and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2 P.M.; Thursday, 2.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.; and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M. Eye Department, 2.

Tuesday, December 27.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Skin Department, 1.45; Saturday, 9.15.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.

Wednesday, December 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday and Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M. Dental Department, 9.30. Eye Department, 2.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

Thursday, December 29.

ST GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Ear and Throat Department, 9 A.M. Eye Department, 2.

Friday, December 30.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Eye Department, 2.

Saturday, December 31.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

Notes, Short Comments & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

COMMUNICATIONS relating to the EDITORIAL business of THE LANCET must in every case be addressed *exclusively* "To the Editors," and not to them otherwise than in their official capacity.

TERCENTENARY OF GALILEO AT PADUA.

A CORRESPONDENT writes:—"I observe in THE LANCET of Dec. 17th that your Special Correspondent refers to the 'admirable English discourses' at the Tercentenary of Galileo at Padua 'losing much of their effect by the strangeness of the language employed.' He must have been misinformed, as not only were the addresses of Sir J. Fayrer and Professor Darwin delivered in Italian, but they were received with marks of considerable approval, and the former was printed *verbatim* in the *Veneto* of Dec. 11th."

A Friendly Society's Medical Officer.—We cannot reopen the discussion pending the decision of the General Medical Council.

THE AZORES.

To the Editors of THE LANCET.

SIRS,—When writing recently the account of my visit to the island of St. Michael in the Azores, an abstract of which you printed three weeks ago, I omitted to refer your readers for full information on the subject to the most complete and most interesting account of the nine islands in this Archipelago, written by Mr. W. F. Walker in his work entitled "The Azores or Western Islands," with maps and illustrations (Trübner & Co.). A copy of this work has quite recently been added to the library of the Royal College of Surgeons, Lincoln's-inn, where of course it may be seen by any Fellow or Member.

I am, Sirs, yours truly,

London, Dec. 21st, 1892. WILLIAM PROWSE.

PROVISION FOR MEDICAL MEN UNABLE TO WORK.

Dr. John Craigie.—The course proposed would be quite impossible. The examining bodies have no powers to impose such a charge. Medical men individually should deny themselves in the early part of life to provide for rainy days and old age. We admit it is difficult to do so; but there are great inducements and facilities, as in the different forms of life insurance. Within the Metropolitan Postal District the Society for the Widows and Orphans of Medical Men dying with scanty residue is an admirable society with ample funds, only complaining of being inadequately appreciated by those whose families might benefit by its steadily increasing accumulations.

MEDICAL ATTENDANCE ON SOLDIERS AND SAILORS.

WITH reference to the inquiry of "Perplexed" in our last issue (p. 1425), he will be interested to know that a claim for medicines and attendance on a soldier can be recovered from the State under the conditions which are laid down in the Army and Navy Regulations, paragraphs 59 and 828. He should write to the principal medical officer of the district for Army Form O 1666, and make out his claim upon this document.

"L'AMENDE HONORABLE."

THE following apology has been sent to Mr. Victor Horsley:—

"Dec. 17th, 1892.

"SIR,—This morning's post has brought me a letter from the secretary of the Victoria-street Society, of which I herewith enclose a copy. From that letter it appears that I was entirely misled in making, on the authority of the writer's former assurance, the statement in our extra number published last month with regard to the alleged falseness of your charge against the Duke of Newcastle. So far, therefore, as concerns the assertion in that article that your statement was untrue, I hasten to offer you the fullest retractation and the most sincere apology. A similar apology will of course be made in the January number of the *Review*, the issue of which I have desired the printers to hasten as much as possible, that no time may be lost in withdrawing, as publicly as it was made, the misstatement we were unfortunately deceived into adopting. Should you desire to send copies of the number containing the retractation to any of your friends I shall be happy to place them at your disposal.—I am &c.,

"(Signed)

"THE EDITOR OF THE 'VERULAM REVIEW.'"

Inclosure.

"Victoria-street Society, Dec. 15th, 1892.

"SIR,—I am directed to inform you that on further inquiry it has been found that the Duke of Newcastle did consult Professor Horsley while a Vice-President of this Society. His name has therefore been removed from the list.—I am &c.,

"(Signed) B. BRYAN, per S.B."

C. T. R.—In the cases mentioned by our correspondent effectual disinfection can only be insured by the use of such powerful agents as sulphur dioxide, chlorine or bromine. There are very simple contrivances to be had for the vapourisation of carbolic acid, eucalyptus &c., which may be obtained at any of the well-known wholesale houses.

Scalpel.—We think it would be held that the covenant was infringed.

"WATCHMAKERS AS OCULISTS."—AN EXPLANATION.

To the Editors of THE LANCET.

SIRS,—Our attention has been called to a paragraph that appeared in THE LANCET of last week under the above heading. We beg herewith to give you our explanation of the original paragraph in the *Horological Journal*. Our ideas were to furnish London and country jewellers &c. with the required information for correct execution of oculists' prescriptions, with which we find from a large experience they are brought in daily touch, and to enable them to take correct measurements for fitting spectacles and folders, also to point out the relative value of the focal measurement of lenses—several systems of which are in use, and lead often to errors and lengthy correspondence. Moreover, we proposed to make clear the system of neutralisation of lenses and the properties of prisms, cylinder and spherical lenses; all of which we considered could be better explained by a qualified and experienced medical man, hence our sole reason for proposing to retain the services of Dr. W. Percy Jones. At the same time we regret to note that through an error Dr. Jones was described as of the Westminster Ophthalmic Hospital. We are, Sirs, yours truly,

Oxford-street, W., Dec. 21st, 1892. J. RAPHAEL & CO.

TAKING THE OATH.

A CORRESPONDENT writes:—"In confirmation of your article on 'Oath Administration' may I venture to relate the following circumstance which happened to my father, Dr. L——, many years ago. He was one of the Middlesex magistrates when a witness—a Scotchman—came before him to give evidence. Something in the man's manner led my father to think that he was about to swear falsely. When the clerk had handed the book and the witness was proceeding quite readily to take the English oath my father stopped him and, lifting up his hand, began very slowly with the words—'I swear by Almighty God' &c. The man drew back, saying, 'Na, na, I canna tak *that* oath.' Does not this point to the greater solemnity of the oath by the 'uplifted hand'"?

A. B. C.—We do not recommend practitioners.

THE MORALITY OF VIVISECTION.

W. J. C. writes:—"Might not vivisectors find a precedent in the 'scapegoat' for their practices? The Sacred Narrative (Leviticus, xvi) states that the Deity instructed His priest to inflict a lingering, and probably a painful, death on an inoffensive animal, to save a people from the effects of their sins."

DOUBLE QUINSY.

Mr. J. A. Eyton-Jones sends us notes of an interesting case of double quinsy, followed by laryngitis, pneumonia and death, notwithstanding some improvement consequent on tracheotomy. The patient, a healthy male, ten months old, the child of healthy parents, developed a double quinsy, with enlargement of the sub-maxillary glands. About the fifth day of illness there was some inspiratory dyspnœa, and some hours later tracheotomy became necessary and was successfully performed. There is said to have been no evidence of false membrane in the fauces or trachea, but in the absence of a post-mortem examination we do not think one can speak with positiveness in this matter. The report makes no mention of the presence or absence of albuminuria, but refers to an imperfectly ventilated drain in the vicinity of the patient. The clinical sequence of events in the absence of positive proof to the contrary is suggestive of diphtheria, a scourge which may be marked in its onset, may occur in circumstances of apparently good sanitation, and whose true nature is sometimes first declared by the presence of albuminuria.

Dr. Thomas W. Parkinson (Tongue).—Our correspondent will find a very perfect description of "retro-pharyngeal abscess," with a complete bibliography of the subject in Bosworth's new volume on "Diseases of the Throat," published by Wood, New York.

"VESALIUS THE ANATOMIST."

To the Editors of THE LANCET.

SIRS,—I would recommend to your correspondent "G. M. C." the "Histoire de l'Anatomie et de la Chirurgie" of M. Portal, published in Paris by P. Fr. Didot le jeune, Quai du Augustins, 1770, where, in the first volume, commencing at page 394 and ending at 433, he will find the fullest account of Vesalius's life and work with which I am acquainted. Albert von Haller, who so much admired the writings of Vesalius, has, in his "Bibliotheca Anatomica," vol. i., liber iv., § 163, pp. 180–87 inclusive, given a good summary of the anatomist's life. Boerhaave and his pupil Albinus wrote a biographical sketch of Vesalius. Haller and Portal both tell of the hatred felt to Vesalius by his contemporaries, especially his quondam friends J. Gunther and Jacobus Bois, with whom as a student he learned the anatomy of Galen. That he died a bachelor is, I think, pretty certain. No writer that I know of makes mention of his having been married; and after his death the vindication of his character was undertaken by his brother, Francis Vesalius, who gave up the study of law and embraced that of medicine, that he might defeat the calumnies of his brother's enemies. On the disputed question, Did Titian illustrate a copy of Vesalius's works? I can give an affirmative answer, and I am not without hope of becoming the possessor of a copy. I may just add that Knight, who published about 1835, considers that it was some political trouble that caused Vesalius to undertake his memorable journey to Jerusalem. Nevertheless, the more I read on the subject the more convinced I am that the flight was to escape clerical persecution. I am, Sirs, yours truly,

Dublin, Dec. 17th, 1892. GEORGE FOY, F.R.C.S.I.

To the Editors of THE LANCET.

SIRS,—I have much pleasure in giving "G. M. C." the required information. Andreas Vesalius was born at Wesel on the Rhine. Therefore, according to the custom of the time, he adopted the name of Vesalius. Three weasels (Old German "Wesel") are represented on his family escutcheon. He studied at Louvain; was a resurrectionist, according to his own confession; went to Paris, where he worked under Sylvius, and, when only twenty-two years old, his fame was so great that he was appointed professor of anatomy at Padua. According to Lauth ("Histoire de l'Anatomie"), he contracted an unfortunate marriage with a wicked woman. He had a severe illness, during which he made a vow that if he recovered he would undertake a pilgrimage to Jerusalem. Persecuted by the Catholics of Madrid, he carried this resolve into effect. Coming back he suffered shipwreck at the Island of Zante. Here he contracted a severe illness, which proved fatal, and he died, deserted by everybody, at the early age of fifty. Prof. Burggraeve's work ("Études sur André Vesal," Gand, 1841) gives a complete life-history of the great man. I am, Sirs, yours truly,

Harlesden, N.W., Dec. 19th, 1892. JULIUS MOSTERTZ.

To the Editors of THE LANCET.

SIRS,—Your correspondent "G. M. C." asks, at page 1424 of your last issue, for information regarding the life and history of Vesalius. In the *Asclepiad*, 1885, p. 132, he will find this subject fully treated. In THE LANCET, June, 1889, p. 1041, he will find an interesting annotation as to whether Vesalius dissected the living. These references are to be seen in Section 565:6 of the "Medical Digest."

I am, Sirs, obediently yours,

Boundary-rd., N.W., Dec. 19th, 1892. RICHD NEALE, M.D. Lond.

GASTROTOMY FOR FOREIGN BODY.

A WOMAN, aged sixty-nine, in a distressed condition of mind, supposed to have swallowed a full-sized razor on Tuesday, Dec. 13th, was admitted into the Lincoln County Hospital the same day. There were no symptoms, and the presence of the razor could not be determined until Sunday, Dec. 18th, when the end could be felt in the region of the pylorus. On Monday vomiting commenced, and Mr. Cant, one of the surgeons to the hospital, operated. Opening the abdomen by an incision in the median line, then seizing the razor and bringing the stomach to the opening, he was able successfully to remove it. The wound in the stomach was doubly sutured and the external wound closed. Thirty hours after the operation the temperature was normal; the bowels had acted naturally and there was no unfavourable symptom. The razor, a large, black, bone-handled one, was somewhat acted upon by its six days' digestion.

DIARIES &c.

We have already received several new medical diaries for the approaching year and these have been brought under the notice of our readers. Specimen pages of Smith's "Physicians', Surgeons' and General Practitioners' Visiting List, Diary, Almanack and Book of Engagements" have been submitted to us, as well as a copy of the book. The specimen pages are circulated for the guidance of those who have not as yet used the book. The almanack is of a convenient size for the pocket and contains ample information for medical officers of health and for general practitioners. Postal regulations, tables of wages, a pharmacopœial companion and other information of a trustworthy kind is given. Ruled pages are provided for visiting list and journal, obstetric engagements, addresses, lists of instruments lent and wanted &c. Altogether the book is as perfect and complete as it is possible for a medical man's diary to be.

THE "DRIQUIC" BLOTTING PAD.

MESSRS. SPICER BROTHERS, 2, New Bridge-street, E.C., have submitted to us a specimen of their new Blotting Pad, furnished with a material which they have named "Driquic." We have examined and tested with some care this fresh addition to the armamentaria of the writing desk and find it for the purpose intended to be much superior to the pads ordinarily employed. A disadvantage commonly experienced by persons who have occasion to make constant use of a pad is that the absorbent power of the blotting paper speedily becomes exhausted, thus necessitating the provision of a fresh sheet. This inconvenience is very much modified by the use of the "Driquic" pad.

"A MODE OF PRESERVING LYMPH."

In the letter of Dr. James Tily which we published in our issue of Dec. 3rd it appears that an error arose in the interpretation of the meaning of the prescription which he recommended for the preservation of vaccine lymph. The following was the actual wording of the formula: "℞. Vaccine lymph, ♏v; best glycerine, aq. destillat, *aa* ʒar. æq., ♏v" This was rendered: "Vaccine lymph 5 minims, best glycerine and distilled water of each 5 minims." By this Dr. Tily was inadvertently made to appear as if he wished the lymph to be diluted to twice the extent which he actually intended.

ERRATUM.—On page 1393 of our issue of Dec. 17th the last line of the first paragraph should read "Autobiography of a Slander," by Edna Lyall.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*North Wales Observer, South Austell Weekly News, Millom Gazette, Public Opinion, Sheffield and Rotherham Independent, Cork Constitution, National Reformer, Retford News, Bucks Herald, Aberdeen Times, Alnwick County Gazette, Birmingham Daily Post, Pudsey News, Surrey Comet, South Times, Worthing Gazette, Leicester Daily Post, English Mechanic, Manchester Examiner, Manchester Courier, Birmingham Daily Gazette, The Telegram (Dorset), Echo, South and North Lincolnshire Advertiser, Sanitary Record, Mining Journal, Local Government Chronicle, Insurance Record, Bristol Mercury, Hertfordshire Mercury, Weekly Free Press and Aberdeen Herald, Reading Mercury, Liverpool Daily Post, Leeds Mercury, Yorkshire Post, Surrey Advertiser, West Middlesex Advertiser, Pioneer Mail, Local Government Journal, Guy's Hospital Gazette, West Middlesex Standard, Times of India, Coatbridge Express, Norwich Mercury, Citizen, Hereford Times, Le Temps (Paris), Sunday Times, Builder, Architect, City Press.*

Communications, Letters &c. have been received from—

A.—Mr. F. S. Allen, Madeira; Messrs. Anderson and Co., Edinburgh; Messrs. Armour and Co., London; Messrs. Austin and Son, Clifton; Anglo-Swiss Condensed Milk Co., London.

B.—Dr. Phillip Boobbyer, Nottingham; Mr. G. S. Bigg, London; Mr. T. Bell, Lancaster; Mr. S. Baron, Manchester; Mr. T. B. Browne, London; Mr. E. Cresswell Baber, Brighton; Messrs. C. Barker and Sons, London; Messrs. Burroughs and Wellcome, London.

C.—Prof. Watson Cheyne, London; Dr. Wm. Collier, Oxford; Mr. S. Crossley, Blackburn; Mr. W. R. Cornish, London; Mr. James C. Clark, Southsea; Mr. M. U. Calamawy, Port Said; Mr. W. Cooper, Westminster; Mr. J. Carter, London; Miss Carson, Burton-on-Trent; Messrs. Cassell and Co., London; Cortland Wagon Co., London.

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L.—Prof. Herbert Lund, Manchester; Liquor Carnis Co., Holborn.

M.—Dr. Maclagan, London; Dr. Theo. Maxwell, Woolwich; Dr. MacGregor, Aberdeen; Mr. Julius Mosterly, Harlesden; Dr. Greville MacDonald, London; Mr. Arthur Mason, Oakwood; Mr. J. Grant Mills, London; Mr. J. H. Morgan, London; Mr. C. Mann, Beeston; Mr. James MacMunn, Crouch End; Messrs. J. Maythorn and Son, Biggleswade; Messrs. J. F. Macfarlan and Co., London; Messrs. Mackey, Mackey and Co., London; Messrs. Macniven and Co., Edinburgh; Messrs. Mitchell and Co., London; Medicus, Birmingham; Maltine Manufacturing Co., London.

N.—Dr. Richard Neale, South Hampstead; Mr G. Northwood, Leytonstone; *Northern Chronicle*, Inverness.

O.—Mr. W. T. Ord, Bournemouth.

P.—Dr. A. M. Paterson, Dundee; Dr. Pye-Smith, London; Dr. Leslie Philips, Birmingham; Dr. T. W. Parkinson, Sutherlandshire; Mr. William Prowse, London; Mr. S. Ed. Pedley, Camberwell; Messrs. Parke Davis and Co., London; G. B. Putnam's Sons, London.

R.—Dr. Rigby, Preston; Mr. F. A. Richardson, Leicester; Mr. T. R. Russell, Liverpool; Mr. Morgan Richards, London; Mr. E. Robinson, Manchester; Messrs. Roe and Co., Salisbury; Royal College of Physicians of London; Rusticus, London.

S.—Dr. Sansom, London; Dr. Sydney Stephenson, London; Dr. C. E. Stechan, Ulverston; Dr. Richard Sisley, London; Mr. James Startin, London; Dr. Robert Saundby, Birmingham; Mr. C. Stonham, London; Dr. Graham Steell, Manchester; Mr. William Slimson, Hyde; Surg.-Capt. R. R. Sleman, London; Mr. J. Scott, Stronorlar, co. Donegal; Mr. H. Sell, London; Mr. F. M. Stone, Wimbledon; Mr. W. L. Saunder, Manchester; Mr. H. Smith, Northampton; Messrs. G. and G. Stern, London; Surrey County Asylum, Brookwood; St. Luke's Hospital; Student; Subscriber.

T.—Dr. S. Johnson Taylor, Norwich. Mr. Lawson Tait, Birmingham; Rev. A. Tooth, Croydon; Messrs. Thorp and Co., Glossop; T. W. P.

V.—Mr. A. M. Vann, Durham; Editor, *Verulam Review*.

W.—Dr. R. T. Williamson, Manchester; Mr. Wood, Liverpool; Mr. Roger Williams, Preston; Mr. C. S. Wyman, London; Mr. Williams, St. David's; Mr. S. Wand, Leicester, Mr. J. S. Walker, Hanley; Messrs. F. Wallers and Co., Hanley; Messrs. Wilson and Son, London; Messrs. Whitworth and Stuart, Manchester; W. J. C.

Letters, each with enclosure, are also acknowledged from—

A.—Mr. W. Anderson, Carmarthen; A. R. T., Donnybrook; Agnus, London.

B.—Dr. P. Best, Louth; Mr. A. Bedborough, London; Messrs. Blondeau et Cie., London; Barmouth, London.

C.—Mr. W. A. Charles, Retford; Mr. W. S. Cameron, London; Mr. H. Collins, Drewsteignton; Mr. G. Cutchlow, Wolverhampton; Chief Surgeon, Tredegar; County Asylum, Prestwich.

D.—Mr. Davison, Alnwick; Mr. E. Dobson, Dhubri; Devon and Exeter Hospital; Dist. Surgeon, Rajmundy, India.

E.—Mr. R. Edwards, Oswestry.

F.—Dr. T. H. Fiske, Aylesford; F., Bridport; F B, Leytonstone-road; F. M., London; Fides, London.

G.—Mr. R. A. Gardner, Glasgow; G.E.R. Co., London.

H.—Mr. Hay, Dartford; Messrs. Hooper and Co, Dartford.

I.—Ilex, London.

J.—Dr. P. P. Jennings, Skibbereen; Mr. W. Jones, Ruabon; Mr. E. R. Jellison, Shanghai; J. R., Bristol.

K.—Mr. Kynaston, Bristol.

L.—Dr. R. H. Lucy, Plymouth; Mr. Loveland, Castleford; Mr. F. Leach, Kensington; Mr. A. M. Littler, Burton-on-Trent; Mr. A. Leishman, Prestbury.

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N.—Notts General Infirmary.

P.—Mr. C. S. Pryce, Shepherd's Bush; Capt. Pead, Dulwich; Portsmouth Royal Hospital.

R.—Dr. M. Ruffer, Westminster; Dr. Robinson, Low Moor; Mr. Rebman, London; Raphael, London; R. D., London.

S.—Dr. J. M. Savage, Kimberley; Mr. G. Savage, Montrose; Mr. C. Smyth, Leytonstone; Mr. H. F. Stokes, London; Mr. D. Simmonds, Newbury; S., London; Surgery, London.

T.—Dr. Tooth, London; Mr. W. Taynton, Victoria-park; Mr. W. Taylor, London; Mr. Thin, Edinburgh; Mr. Thomlinson, Partick; Mr. Tyte, Minchinhampton; Theta, London.

U.—University College, Dundee;

W.—Dr. C. T. Williams, London; Dr. T. Watt, Darlington; Mr. S. Wood, Blackpool; Mr. J. Worrall, Southport Infirmary; Mr. A. R. Wilhelm, Cape Colony.

Z.—Z. Y. X., London.

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